



United States Department of Agriculture

Colorado Snow Surveys

Water Availability Task Force Meeting

July 19th, 2016

NRCS Snow Survey and Water Supply Forecasting Program

Brian Domonkos

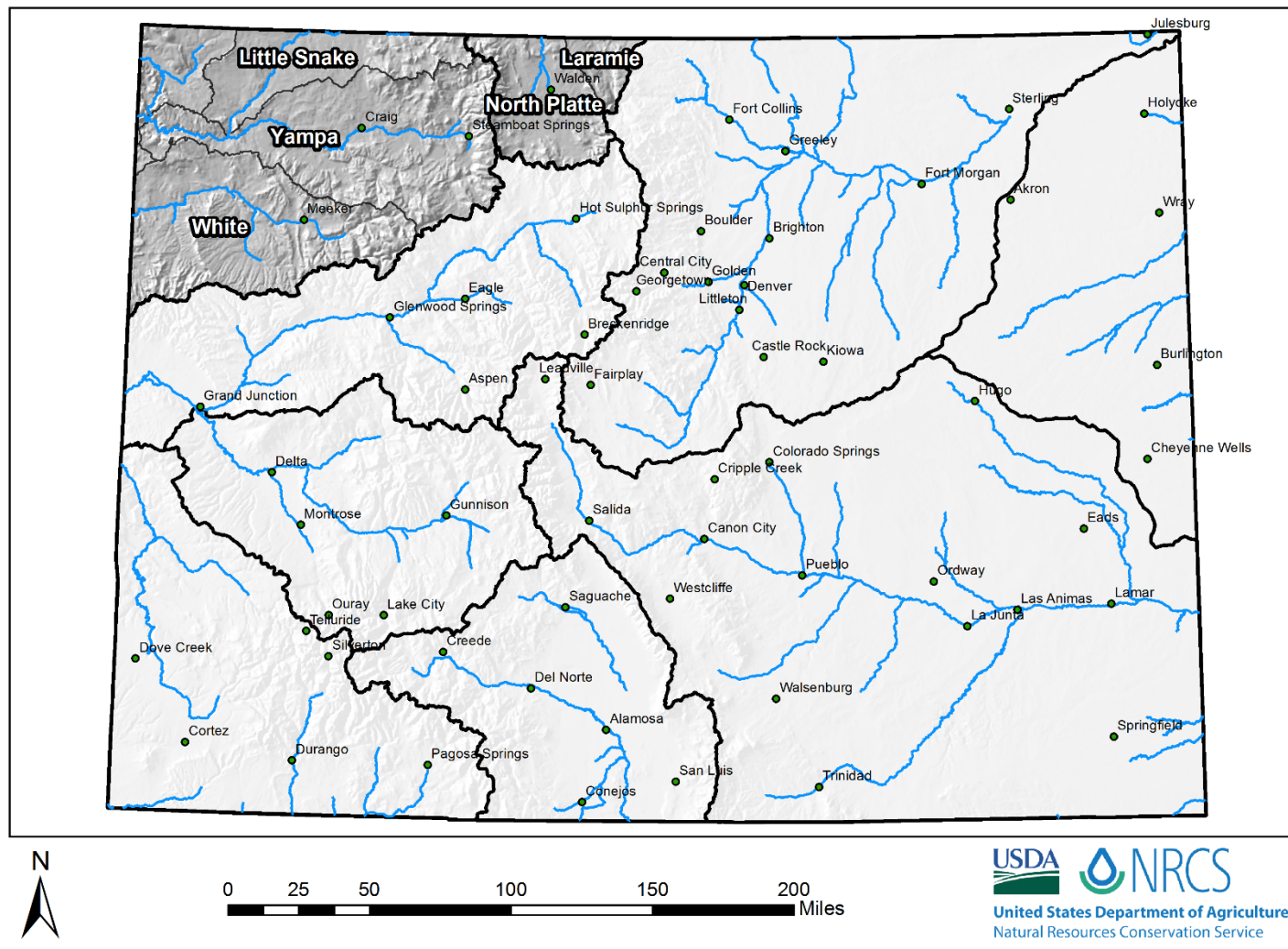
Hydrologist

720-544-2852

<http://www.nrcs.usda.gov/wps/portal/nrcs/main/co/snow/>

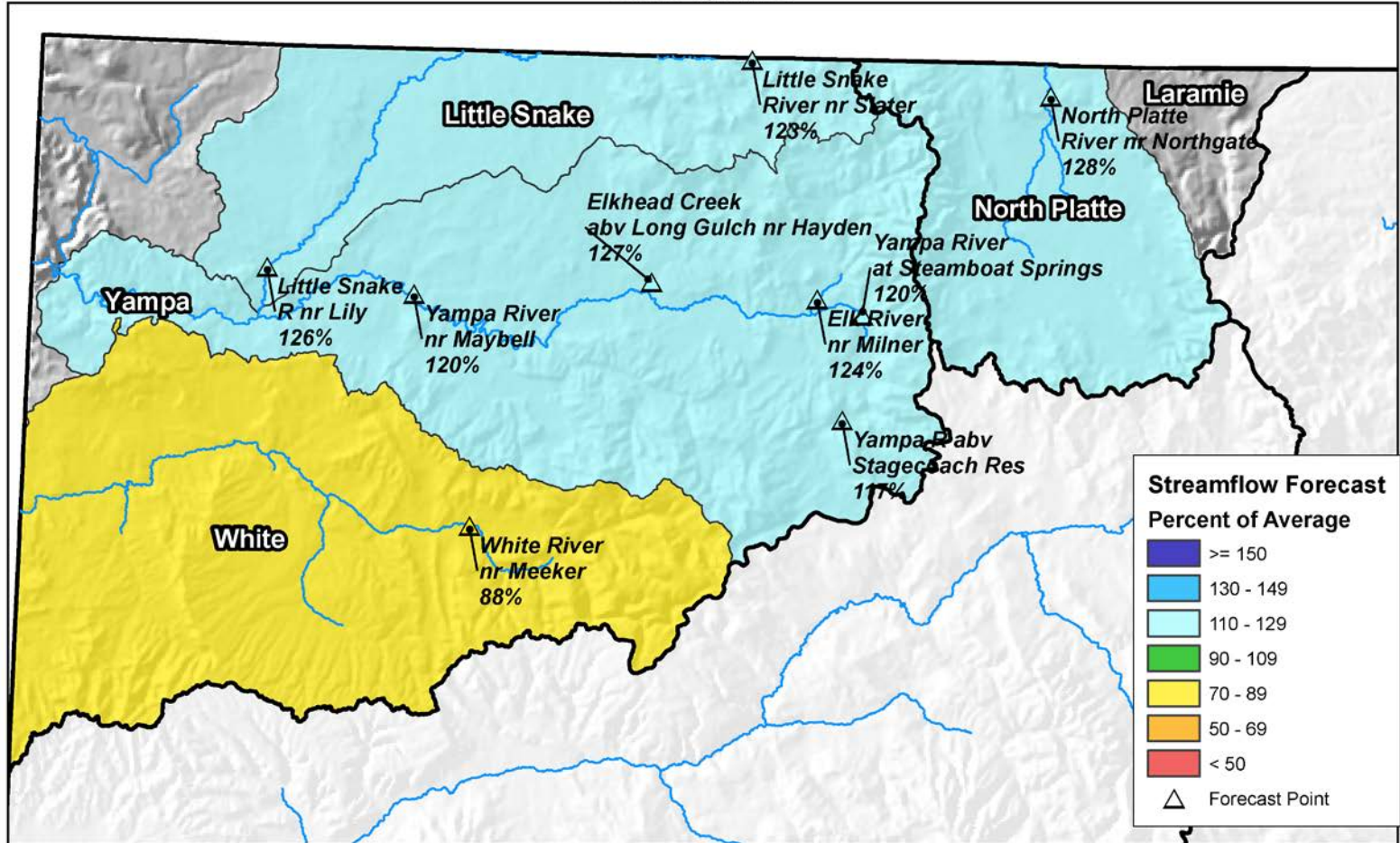
Major Basin Summary

Yampa, White, and North Platte River Basins



Yampa, White, and North Platte River Basins Streamflow Forecast Summary

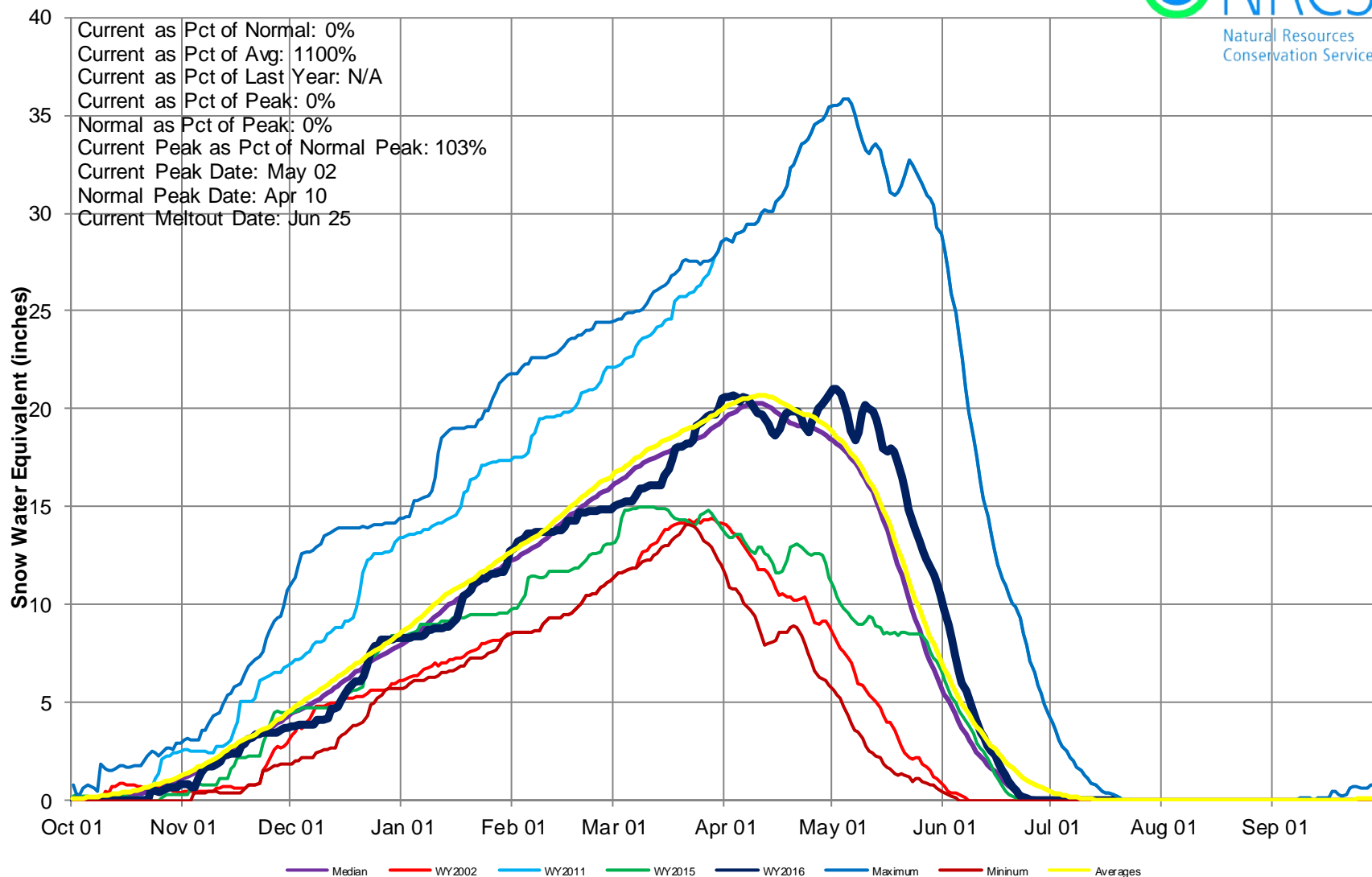
June 1, 2016



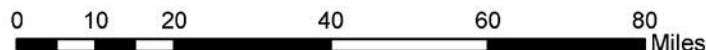
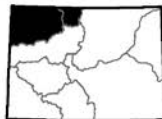
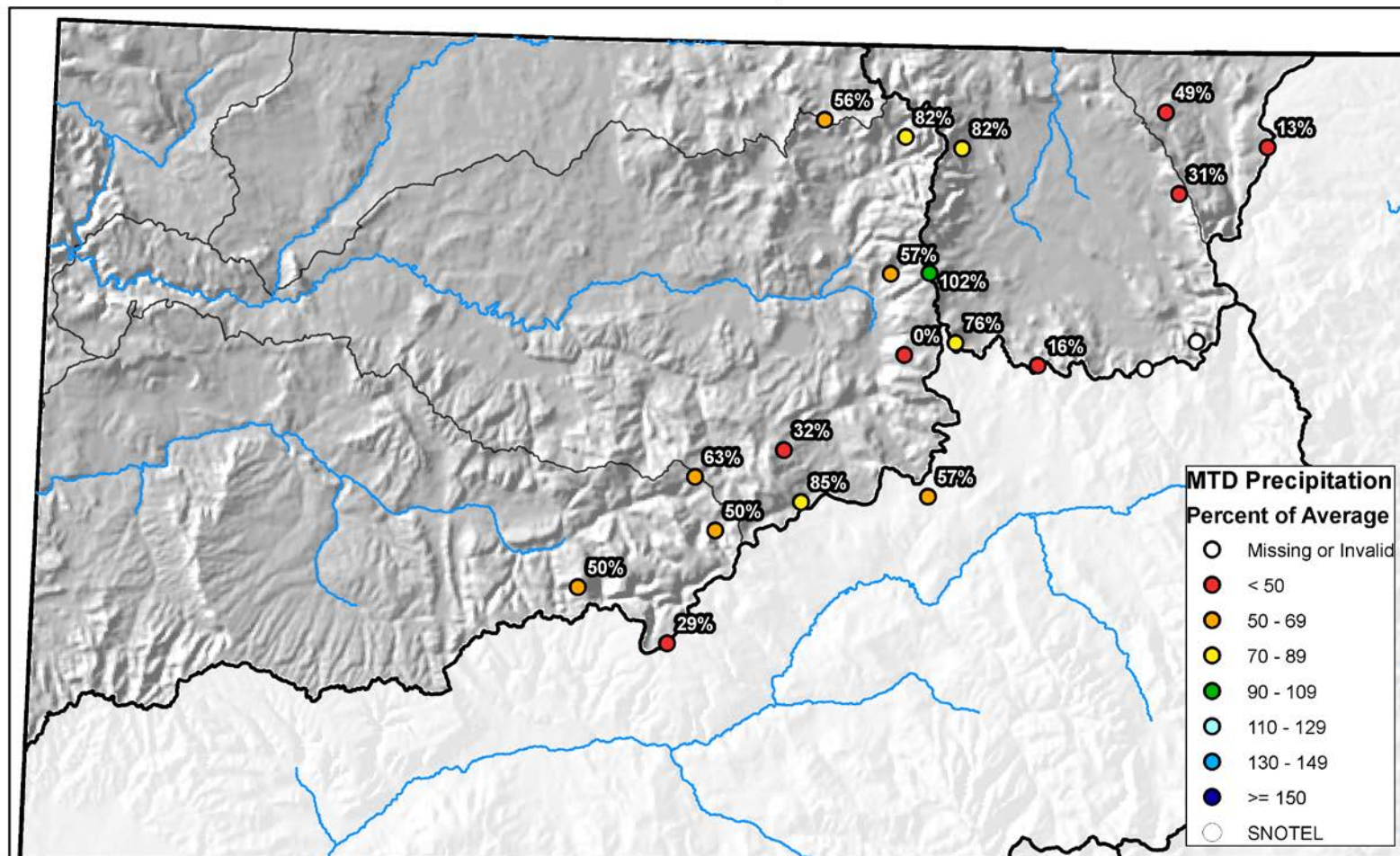
0 10 20 40 60 80 Miles

Yampa, White & North Platte River Basins High/Low Snowpack Summary

Based on Provisional SNOTEL data as of Jul 19, 2016



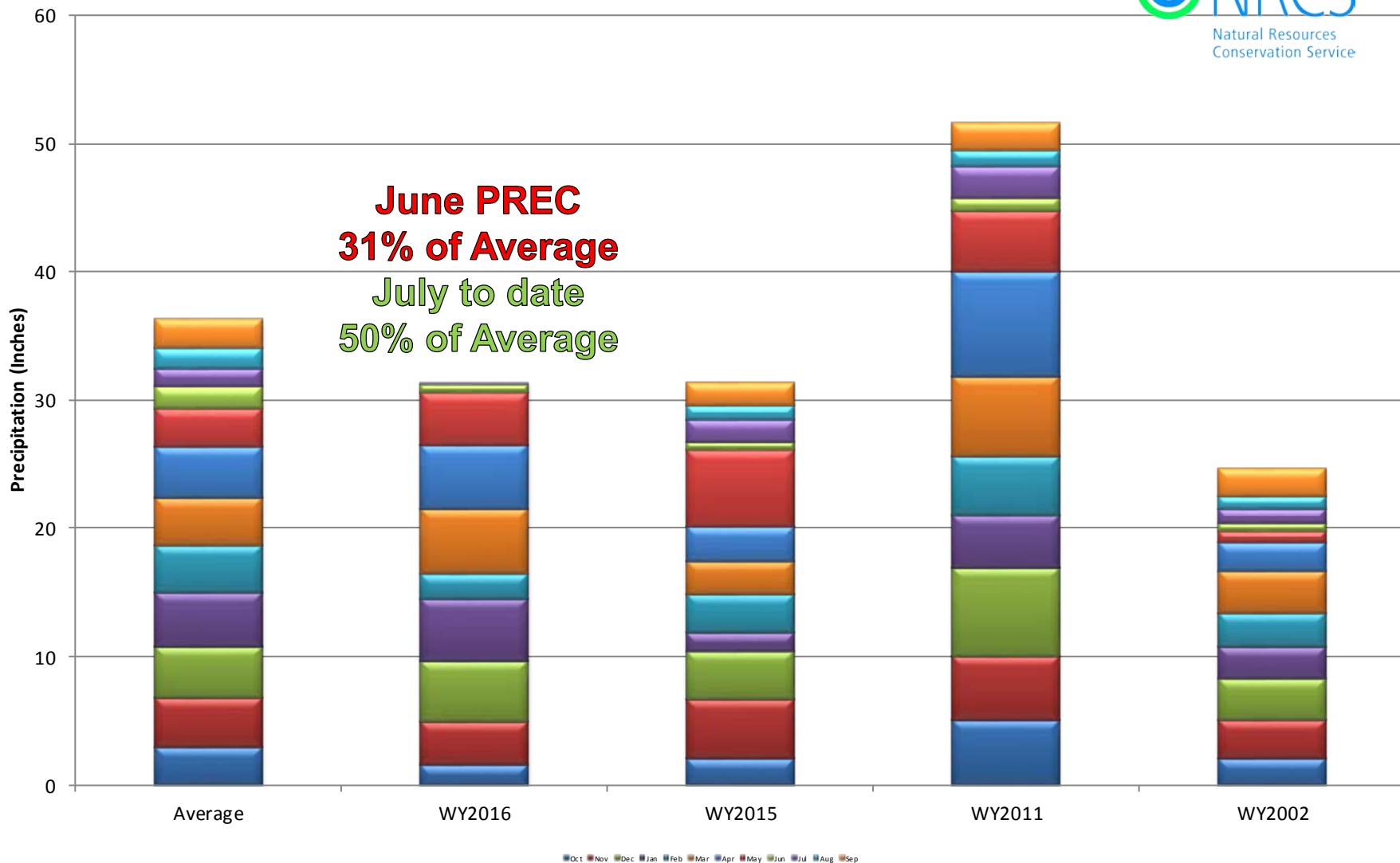
Yampa, White, and North Platte River Basins Month to Date Precipitation Summary Current as of Jul 19, 2016





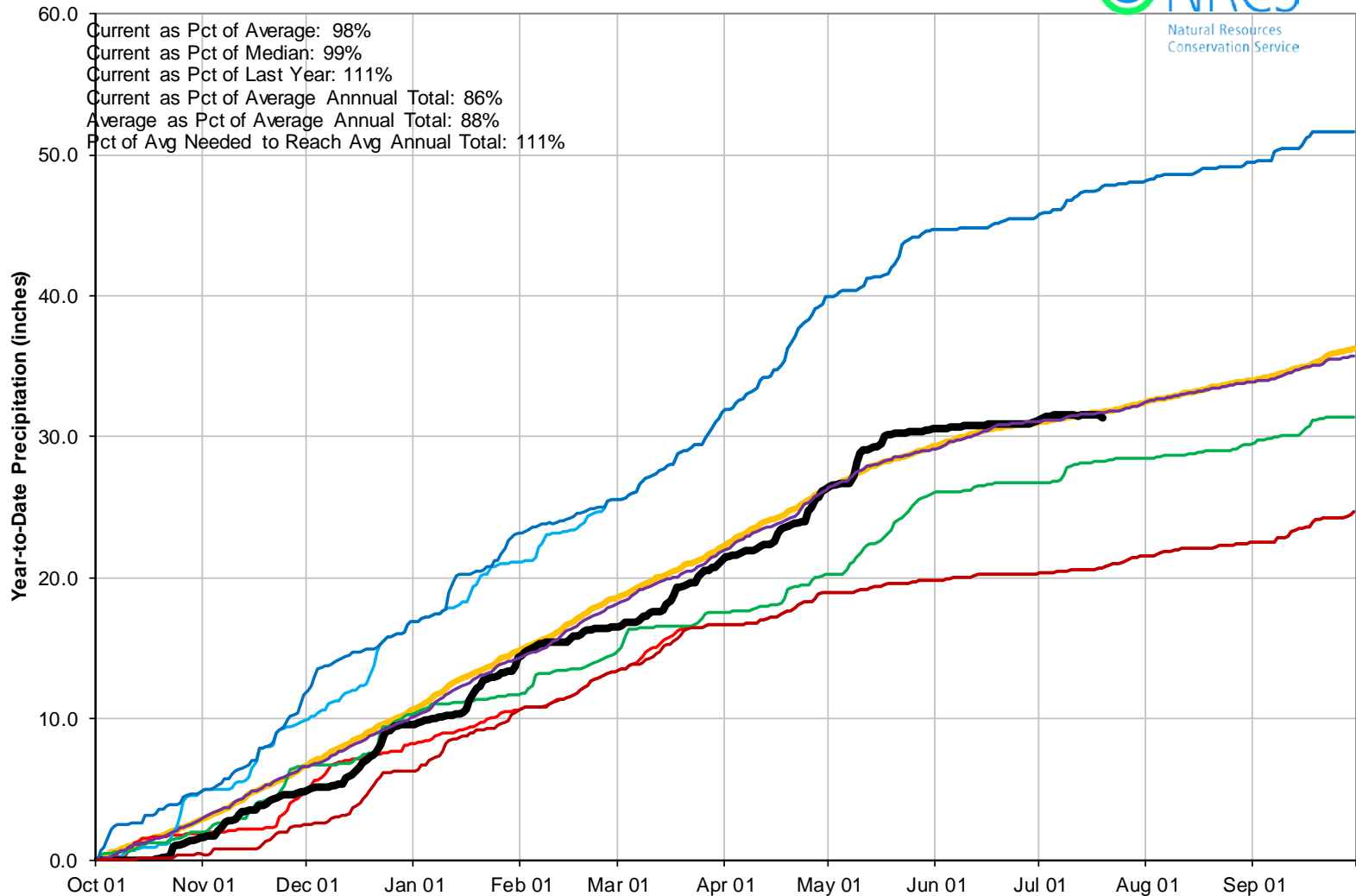
Yampa & White River Basins High/Low Monthly Precipitation Summary

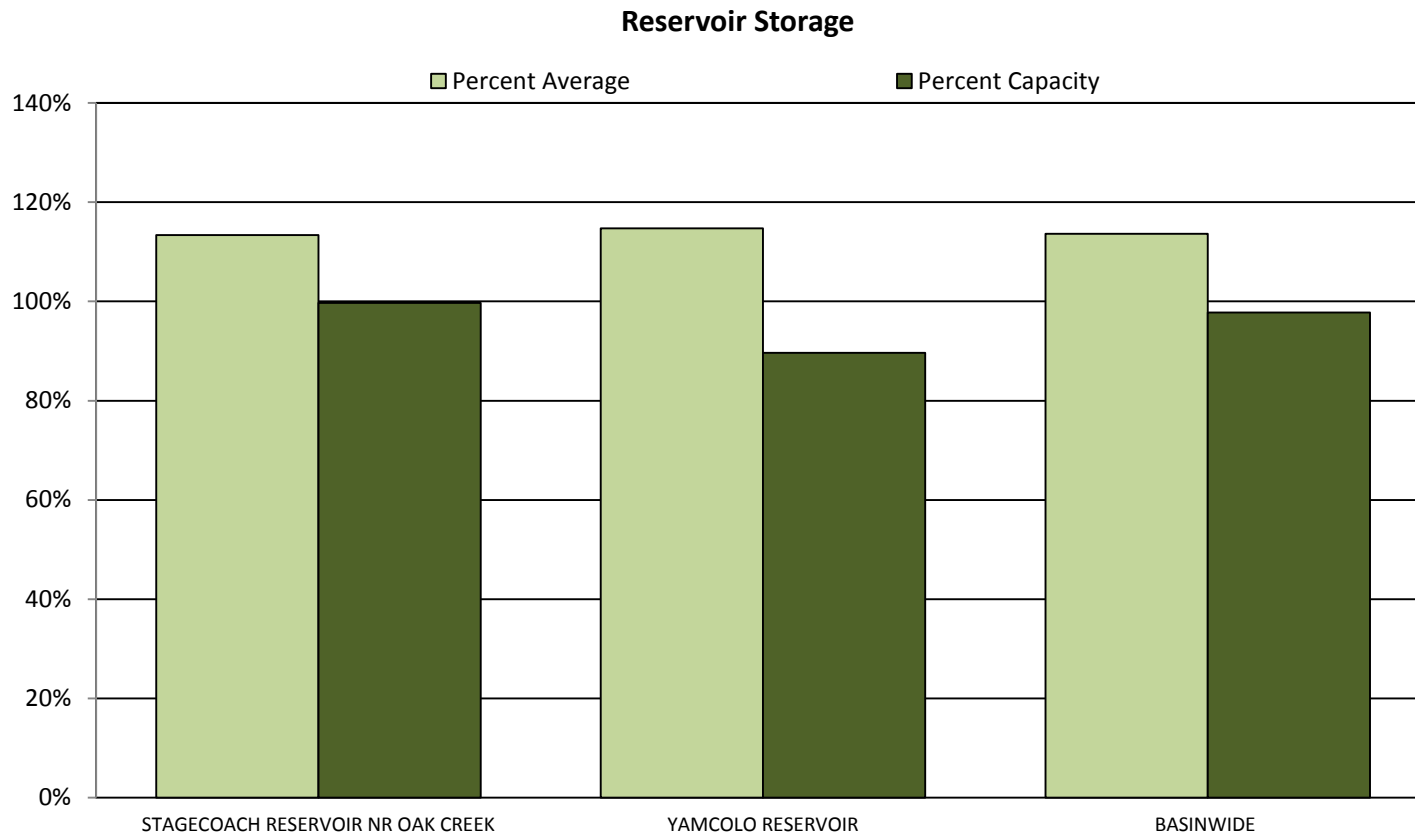
Based on Provisional SNOTEL data as of Jul 19, 2016



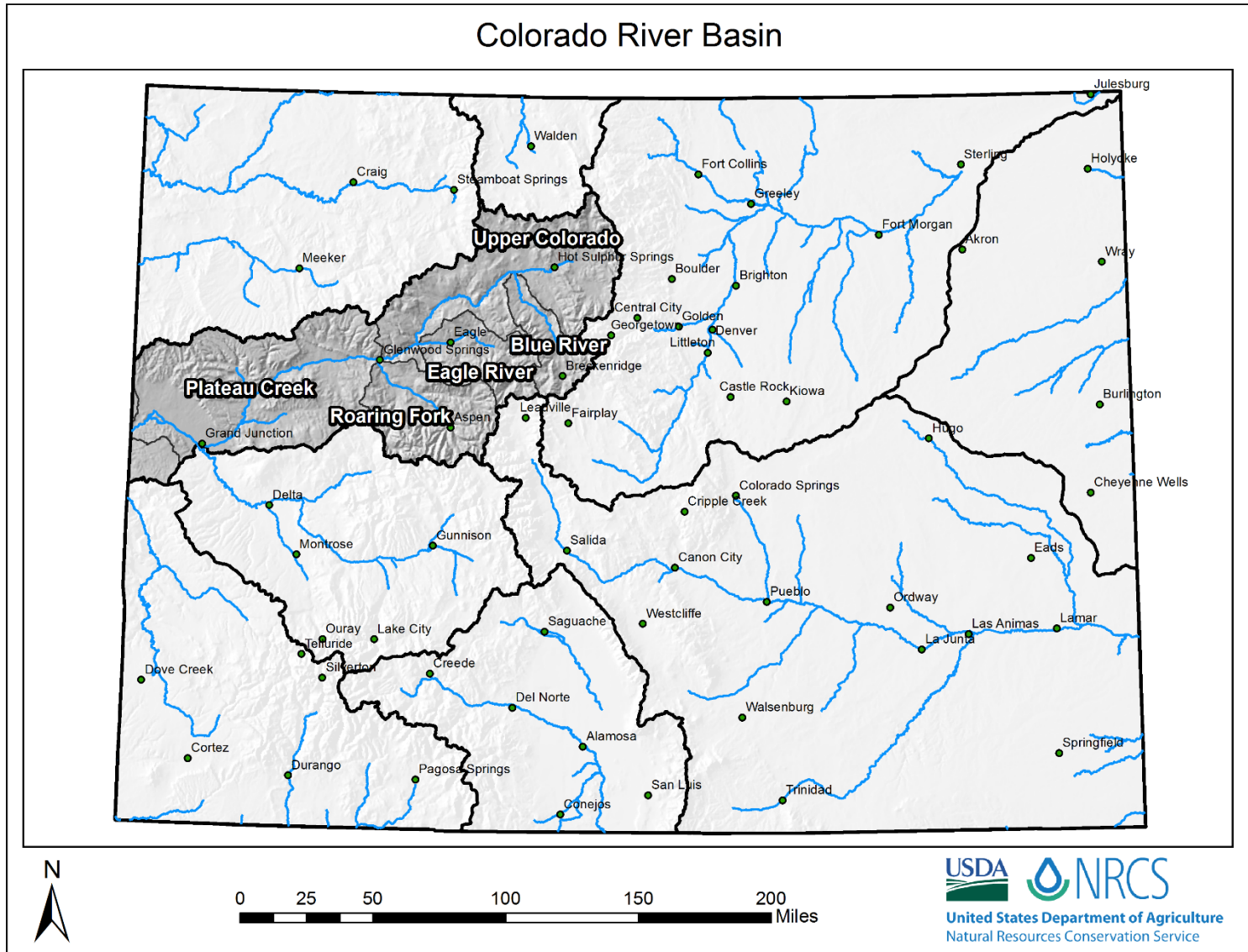
Yampa & White River Basins High/Low Year-to-Date Precipitation Summary

Based on Provisional SNOTEL data as of Jul 19, 2016



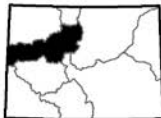
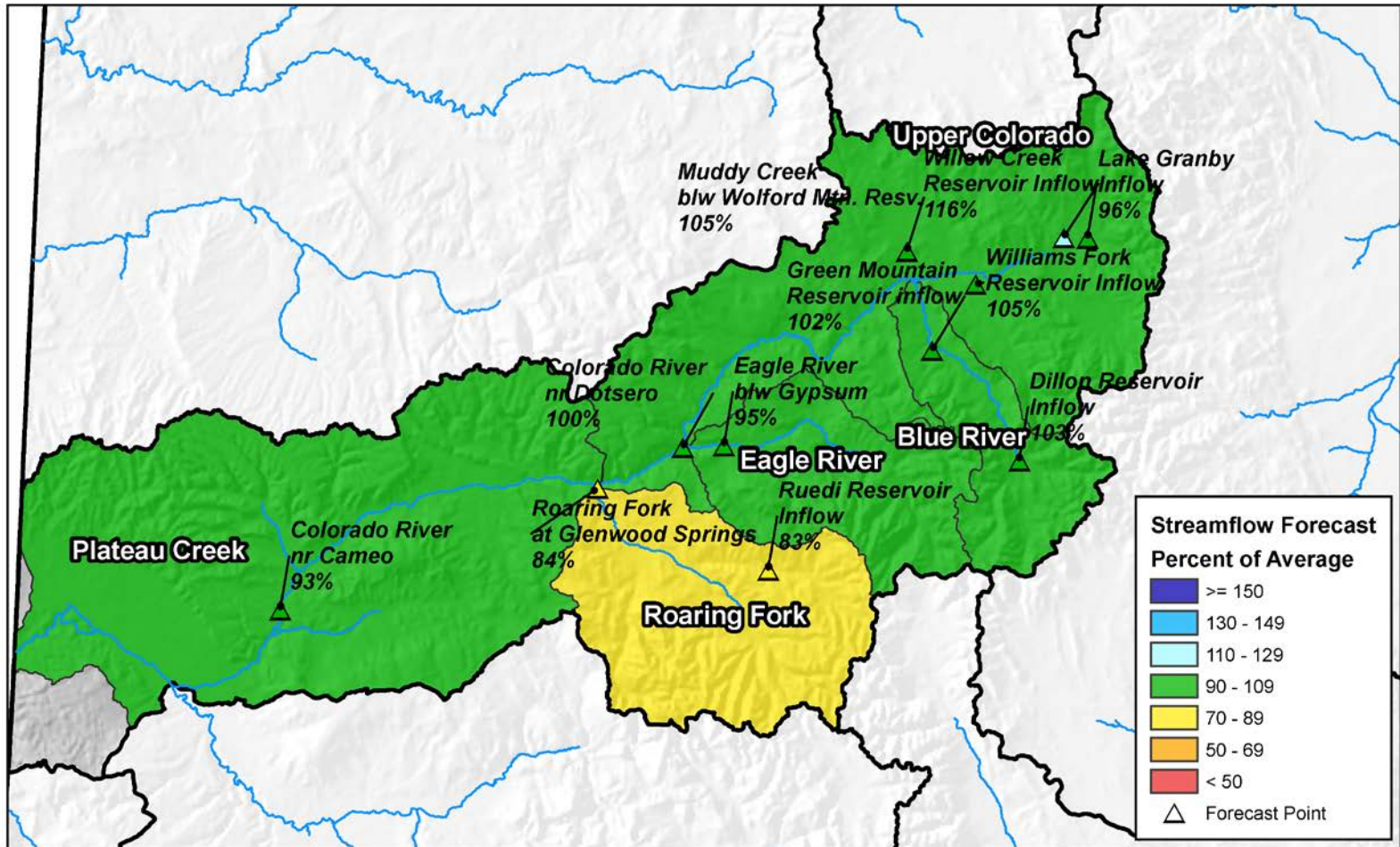


Major Basin Summary



Upper Colorado River Basin Streamflow Forecast Summary

June 1, 2016

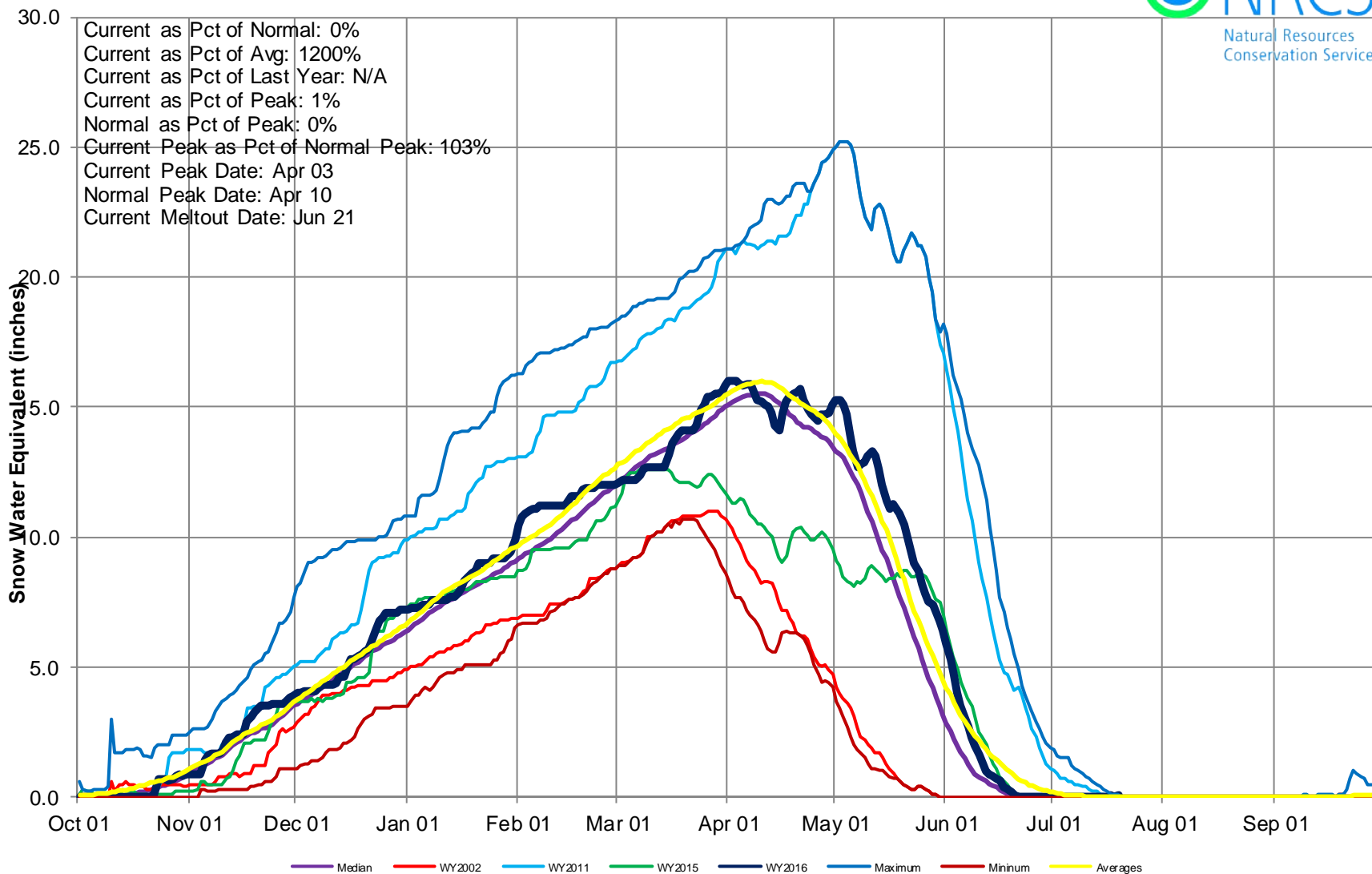


0 10 20 40 60 80 Miles



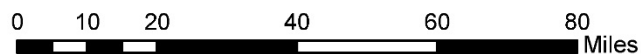
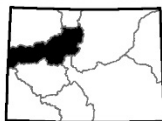
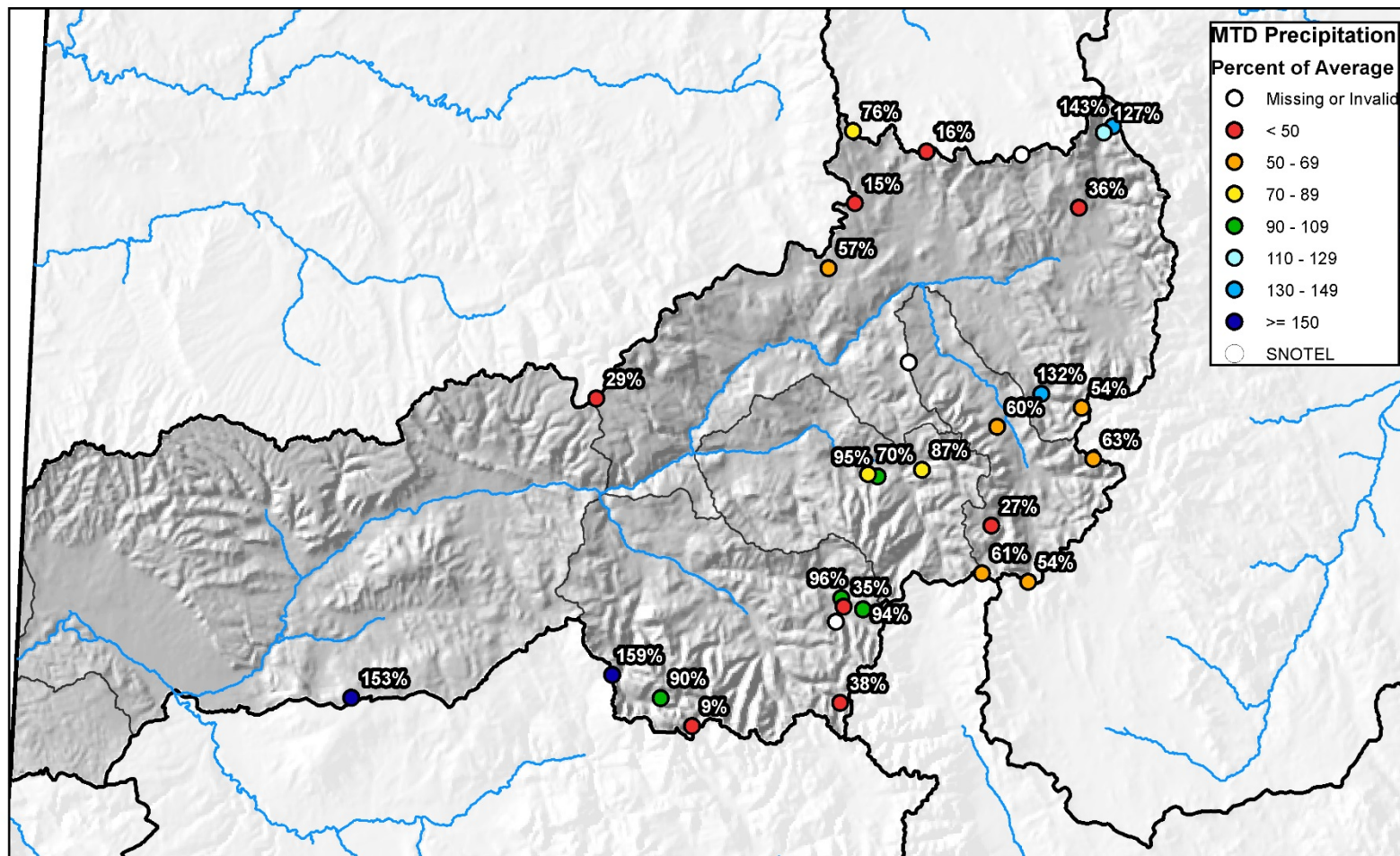
Upper Colorado River Basin High/Low Snowpack Summary

Based on Provisional SNOTEL data as of Jul 19, 2016



Upper Colorado River Basin Month to Date Precipitation Summary

Current as of Jul 19, 2016



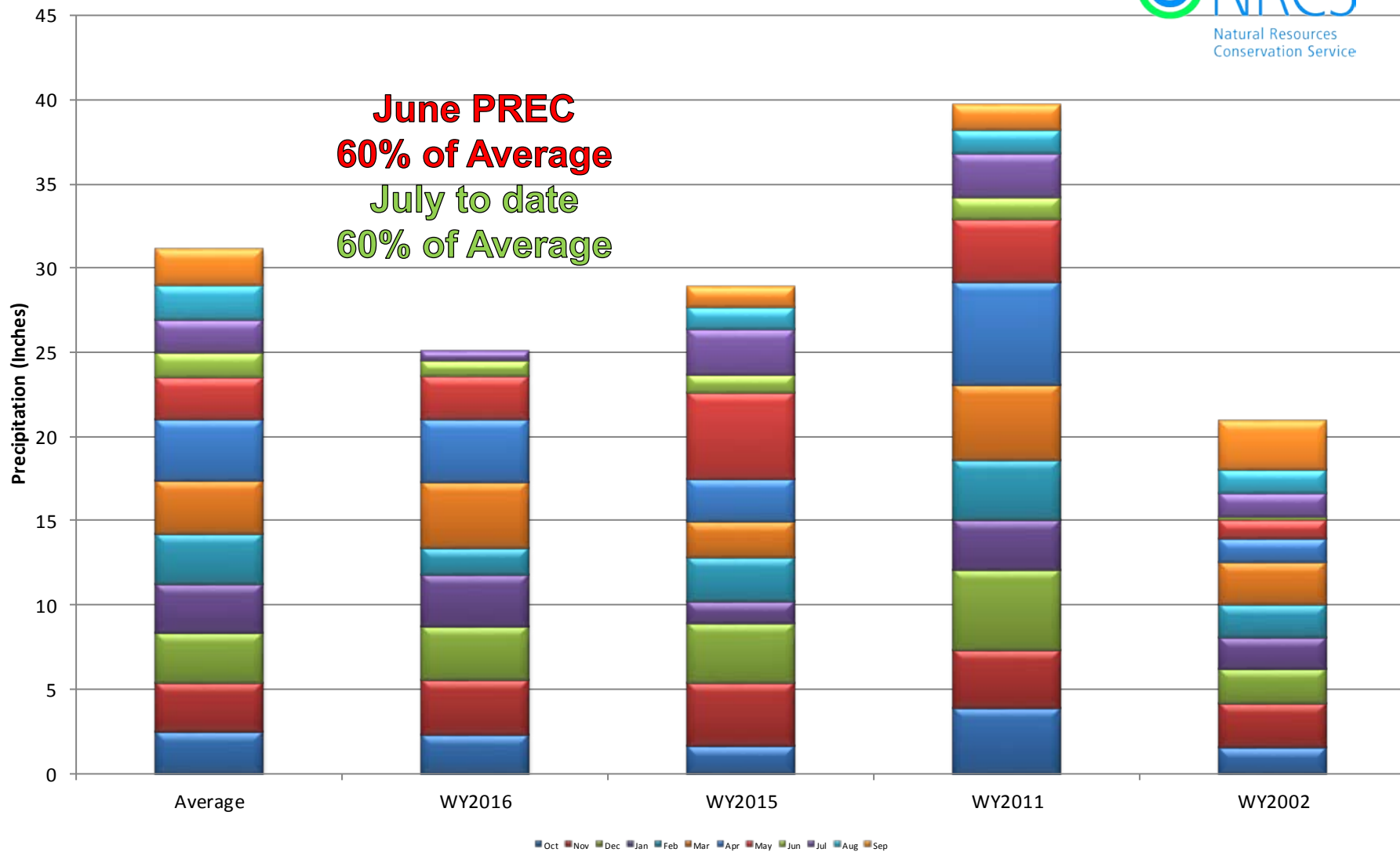
United States Department of Agriculture

Natural Resources Conservation Service



Upper Colorado River Basin High/Low Monthly Precipitation Summary

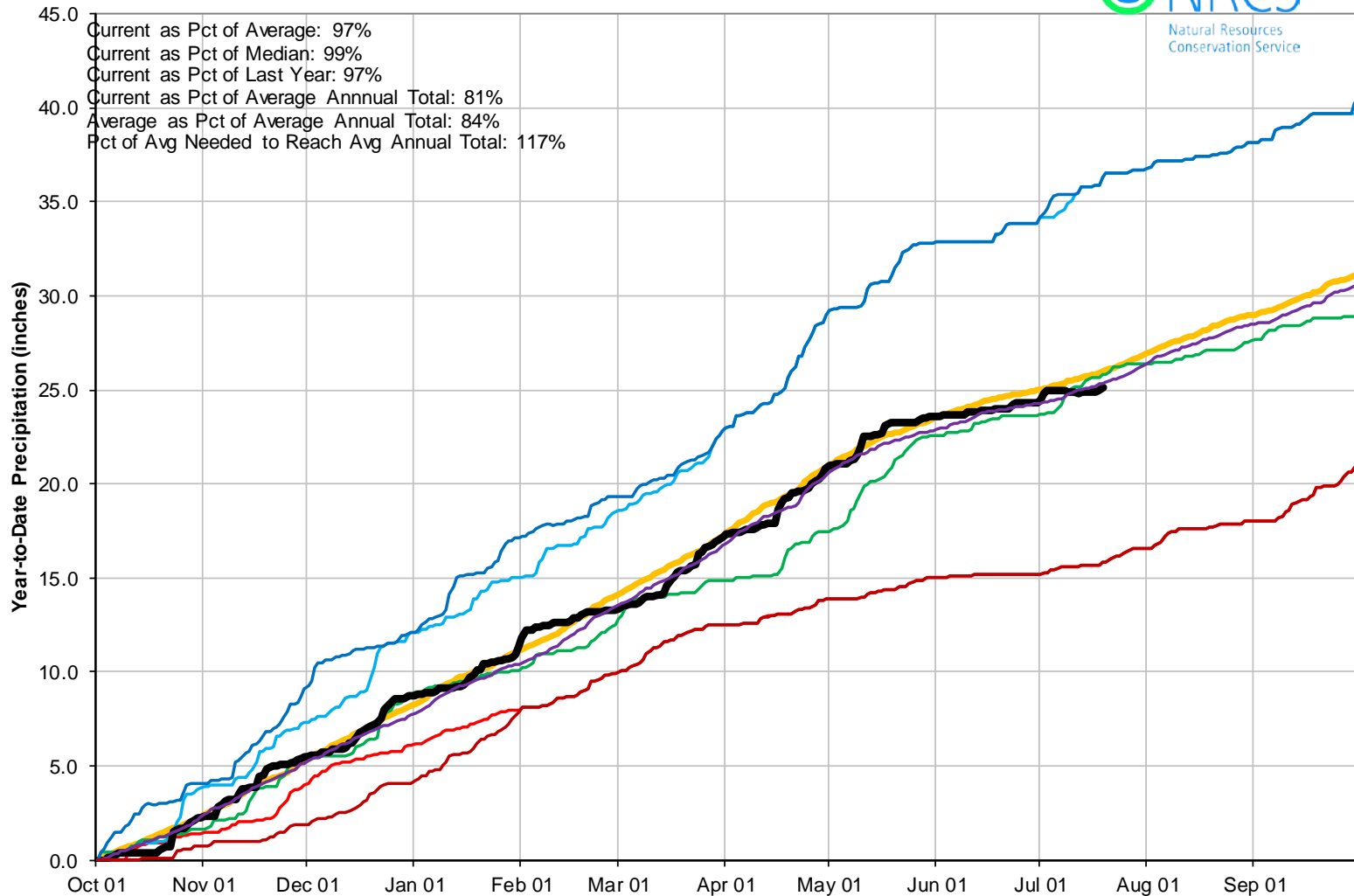
Based on Provisional SNOTEL data as of Jul 19, 2016



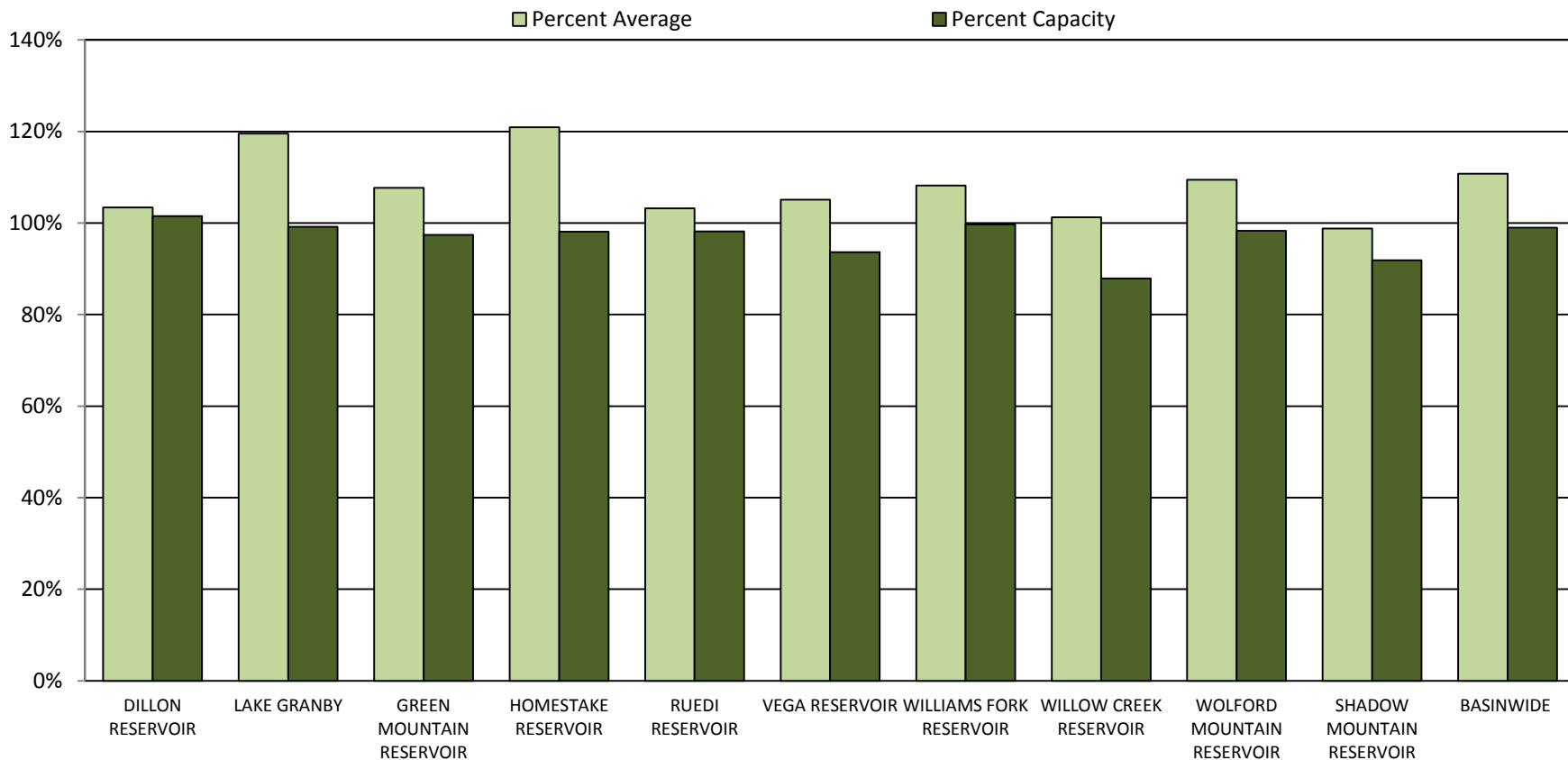


Upper Colorado River Basin High/Low Year-to-Date Precipitation Summary

Based on Provisional SNOTEL data as of Jul 19, 2016

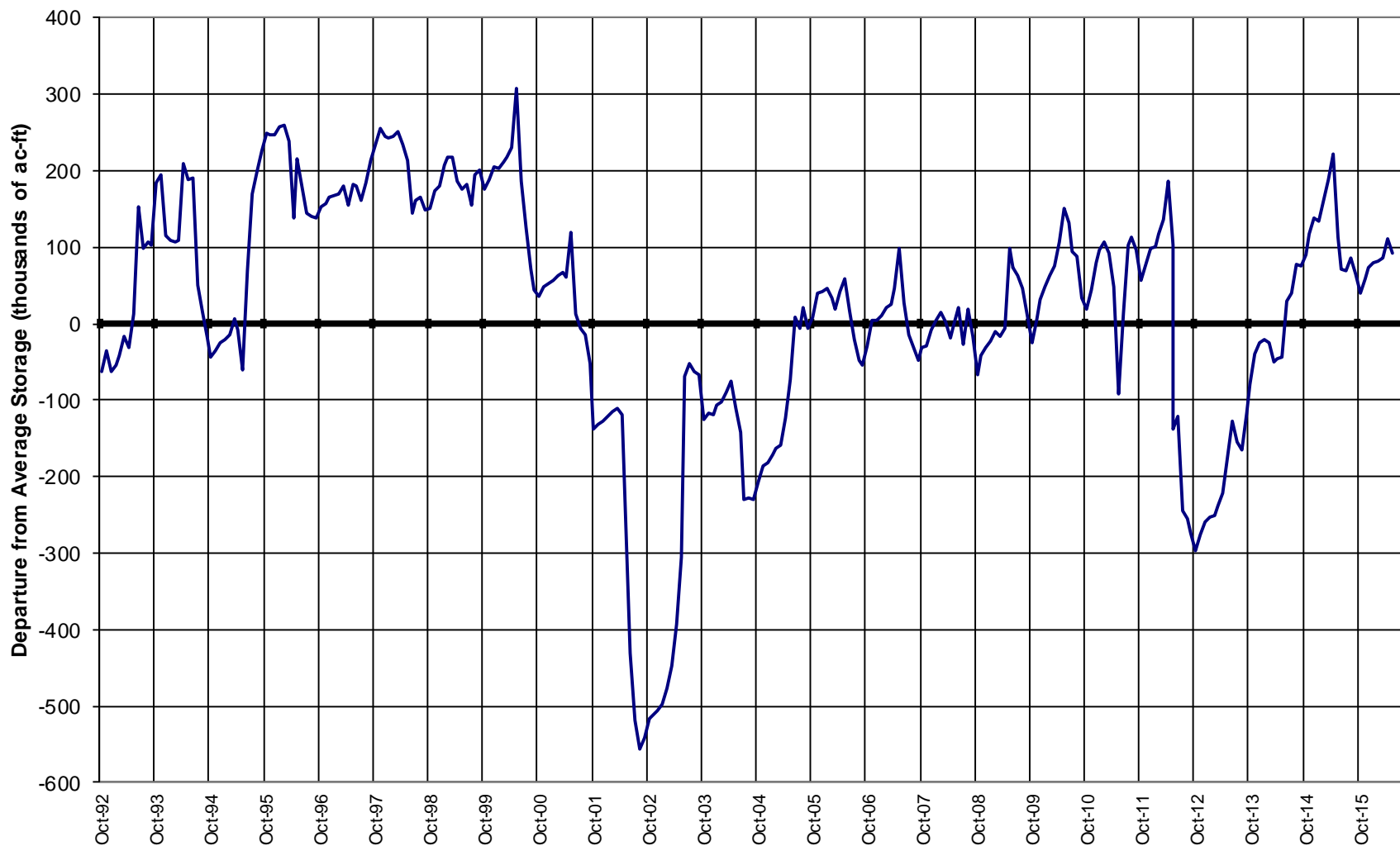


Reservoir Storage





COLORADO RIVER BASIN Reservoir Storage Departure from Average



A map of Colorado illustrating the major river basins and their associated cities. The basins are labeled in bold text: Cache La Poudre, Big Thompson, Boulder-St. Vrain, Clear Creek, and Upper South Platte. The map shows the state's boundaries, major rivers, and numerous cities. The basins are shaded in light gray, and the rivers are shown in blue. The cities are marked with green dots and labeled with their names.

Cache La Poudre

Big Thompson

Boulder-St. Vrain

Clear Creek

Upper South Platte

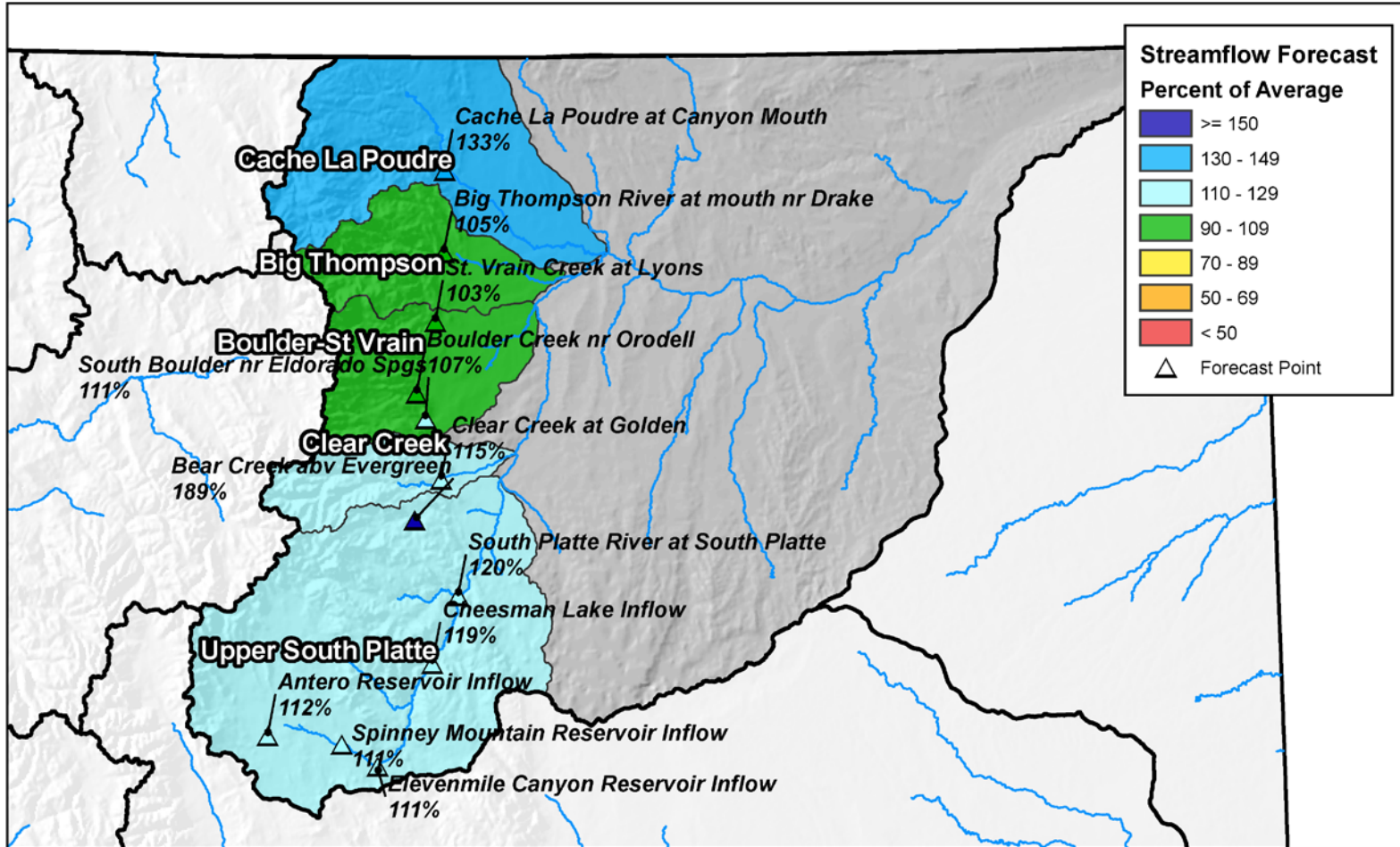
Cities shown include: Walden, Craig, Steamboat Springs, Fort Collins, Greeley, Sterling, Holyoke, Meeker, Hot Sulphur Springs, Boulder, Brighton, Fort Morgan, Akron, Wray, Eagle, Glenwood Springs, Central City, Golden, Denver, Littleton, Breckenridge, Castle Rock, Kiowa, Burlington, Aspen, Leadville, Fairplay, Hugo, Cheyenne Wells, Grand Junction, Delta, Montrose, Gunnison, Salida, Cripple Creek, Colorado Springs, Canon City, Pueblo, Eads, Ordway, Las Animas, Lamar, Oury, Lake City, Telluride, Silverton, Creede, Del Norte, Walsenburg, Alamosa, San Luis, Trinidad, Conejos, Pagosa Springs, Durango, Cortez, Dove Creek, and La Junta.



0 25 50 100 150 200 Miles

South Platte River Basin Streamflow Forecast Summary

June 1, 2016

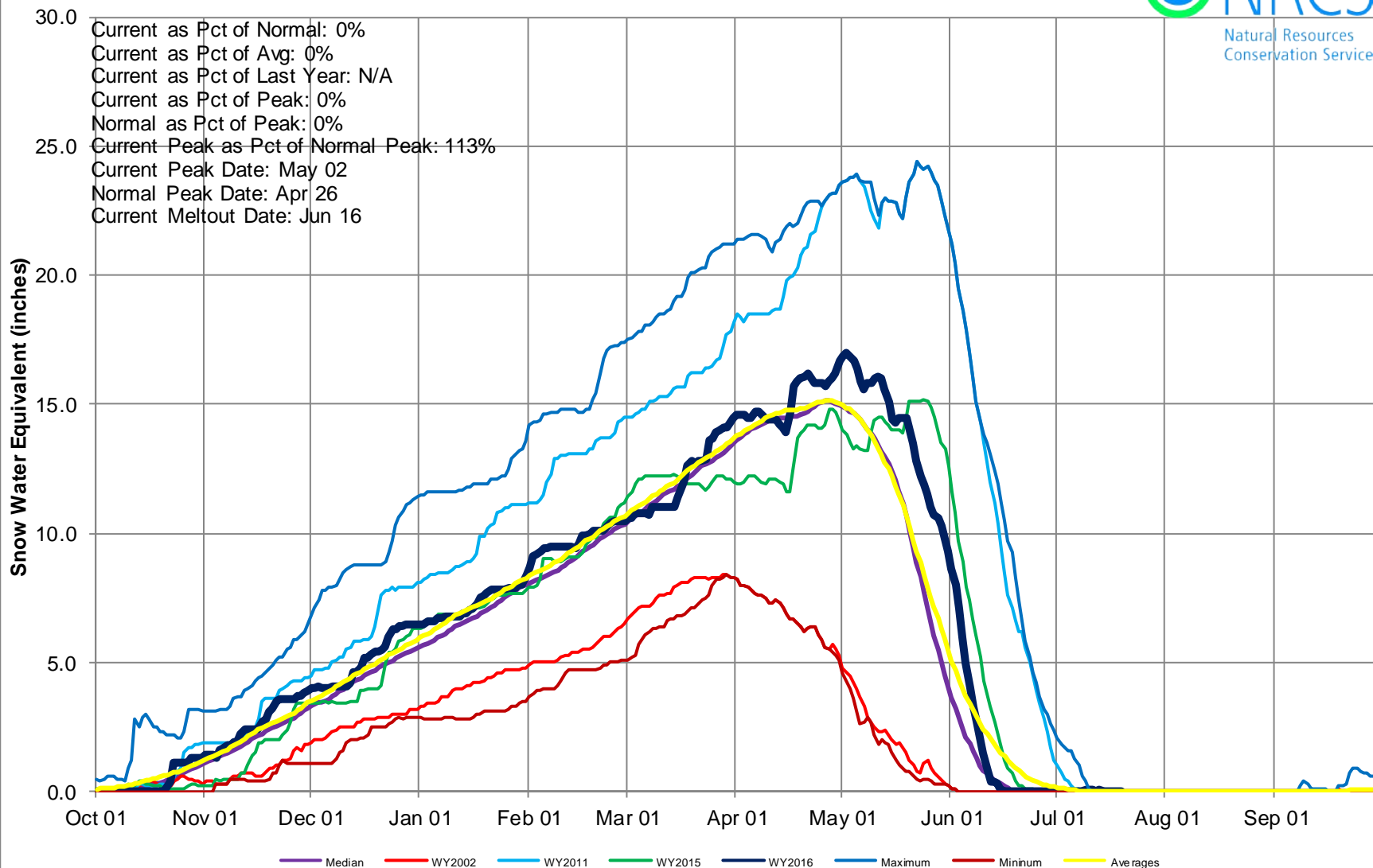


0 12.5 25 50 75 100 Miles



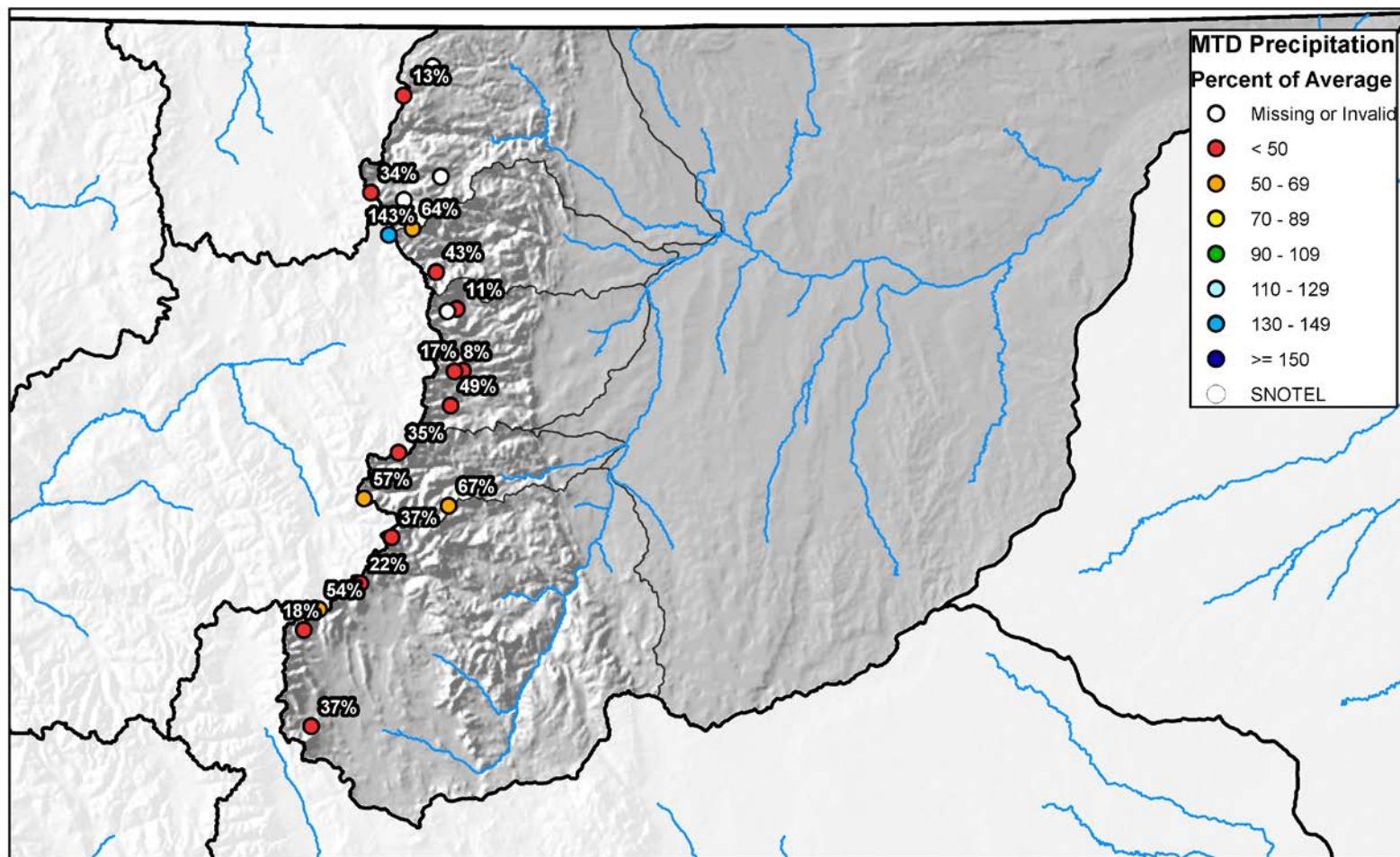
South Platte River Basin High/Low Snowpack Summary

Based on Provisional SNOTEL data as of Jul 19, 2016



South Platte River Basin Month to Date Precipitation Summary

Current as of Jul 19, 2016

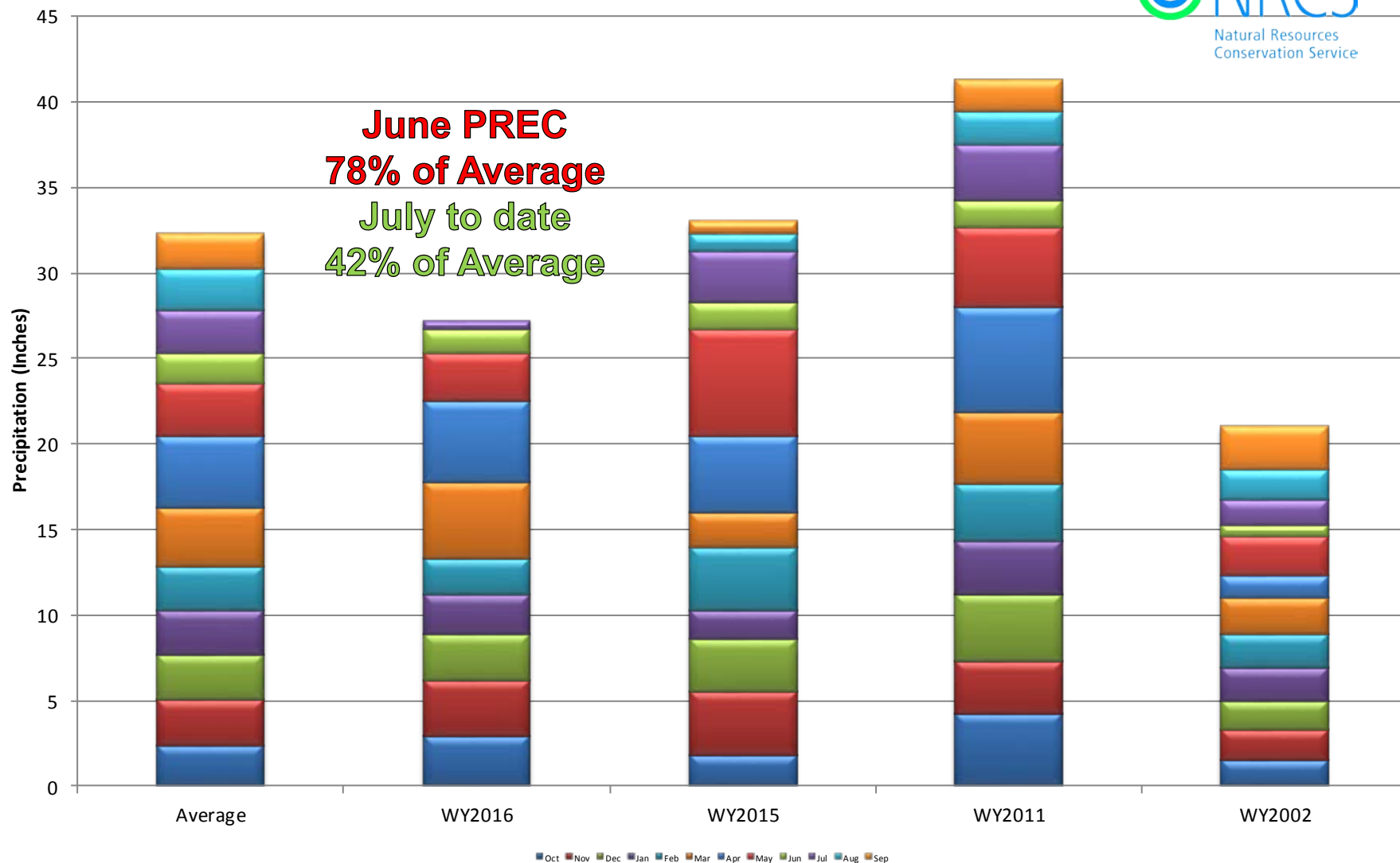


0 10 20 40 60 80 Miles



South Platte River Basin High/Low Monthly Precipitation Summary

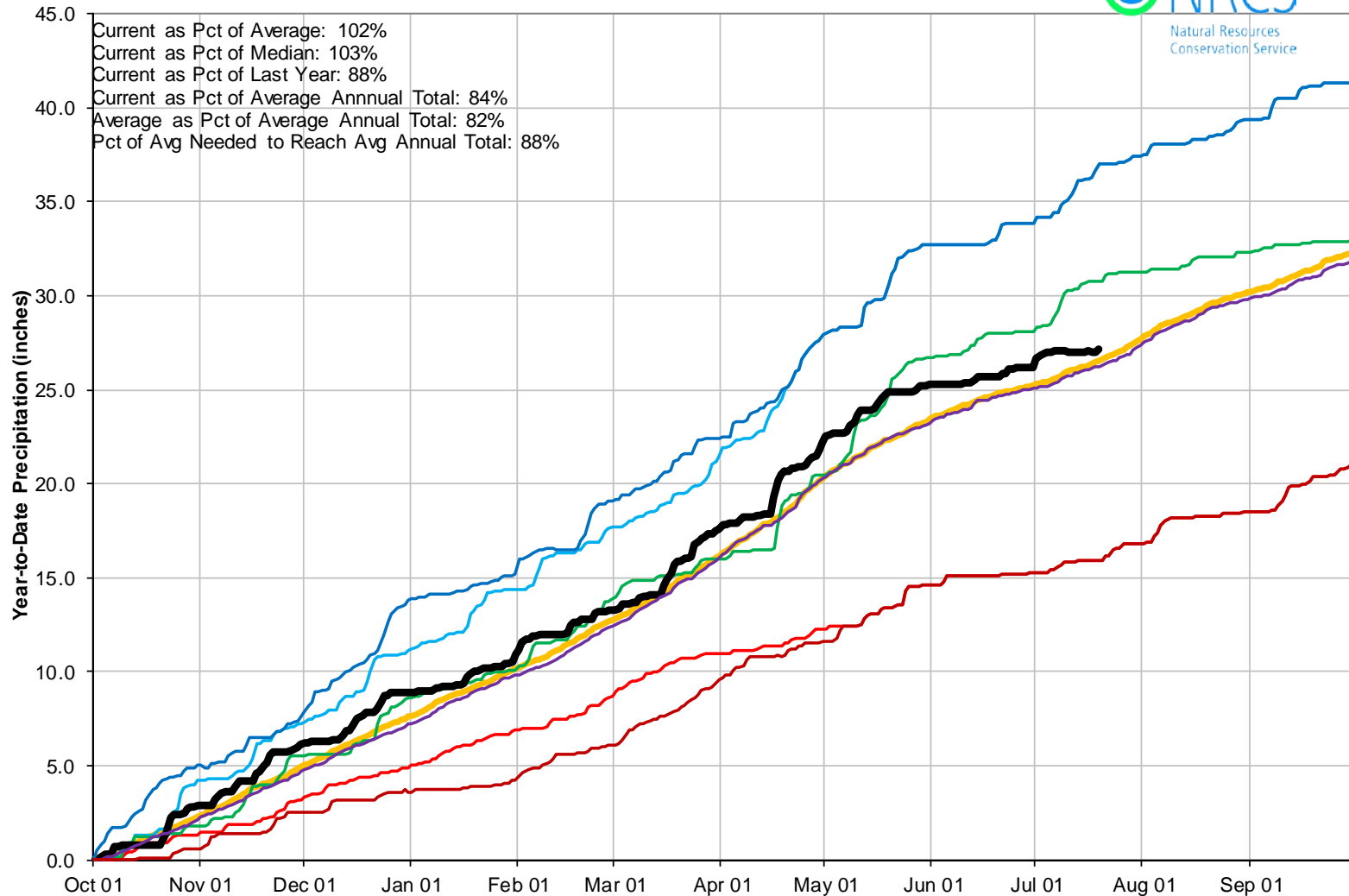
Based on Provisional SNOTEL data as of Jul 19, 2016

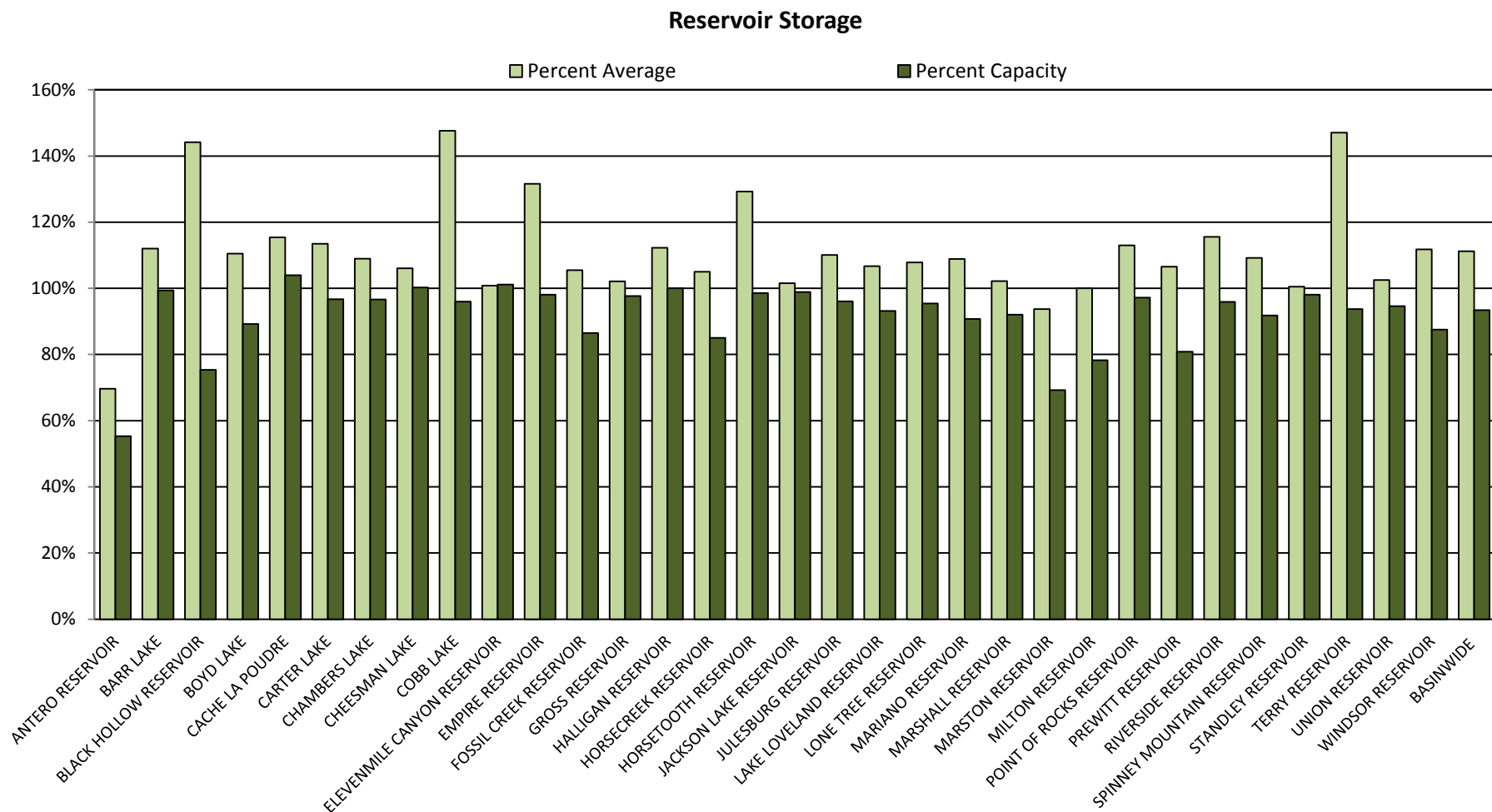




South Platte River Basin High/Low Year-to-Date Precipitation Summary

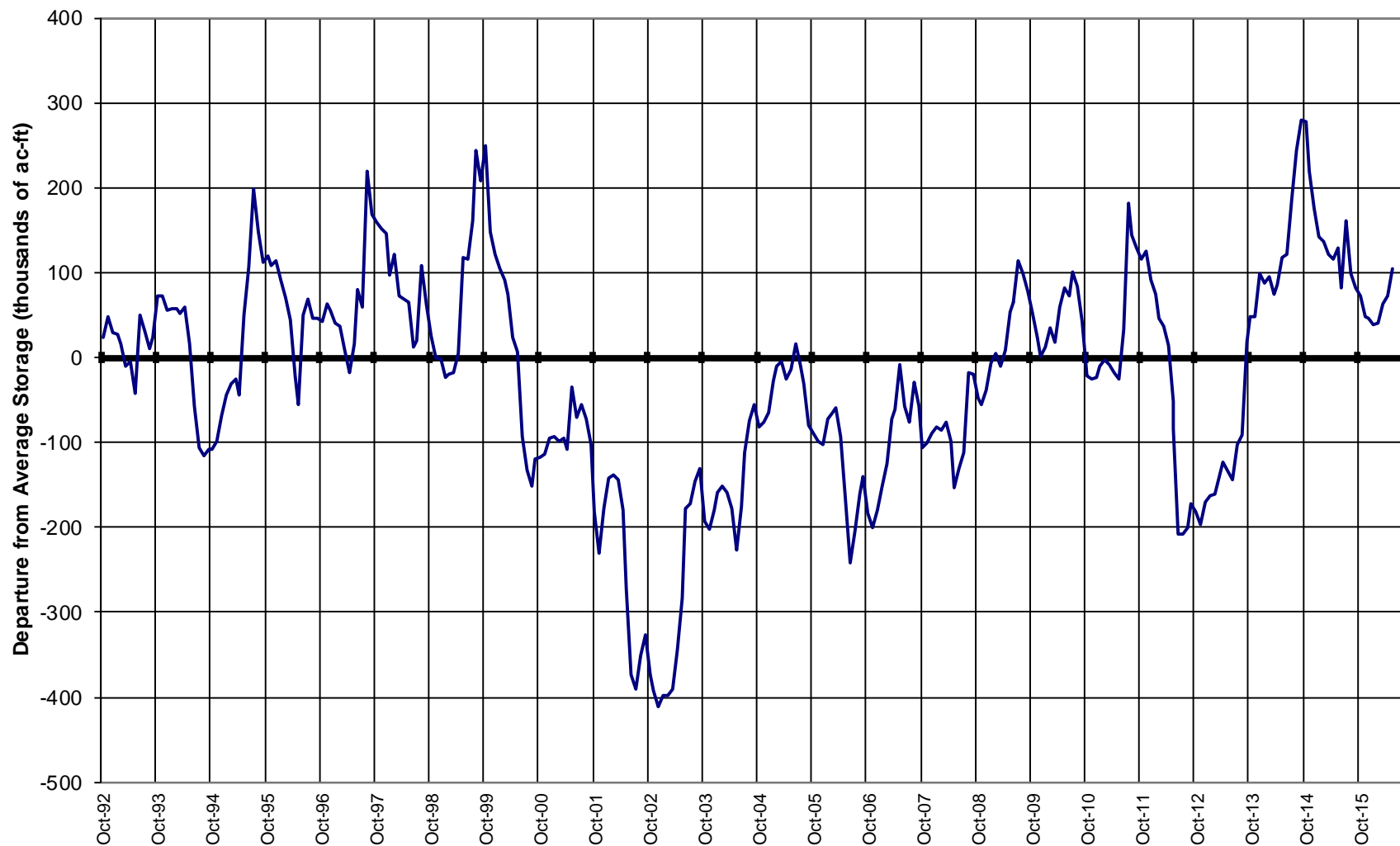
Based on Provisional SNOTEL data as of Jul 19, 2016





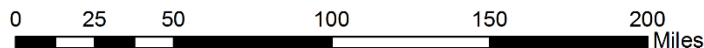
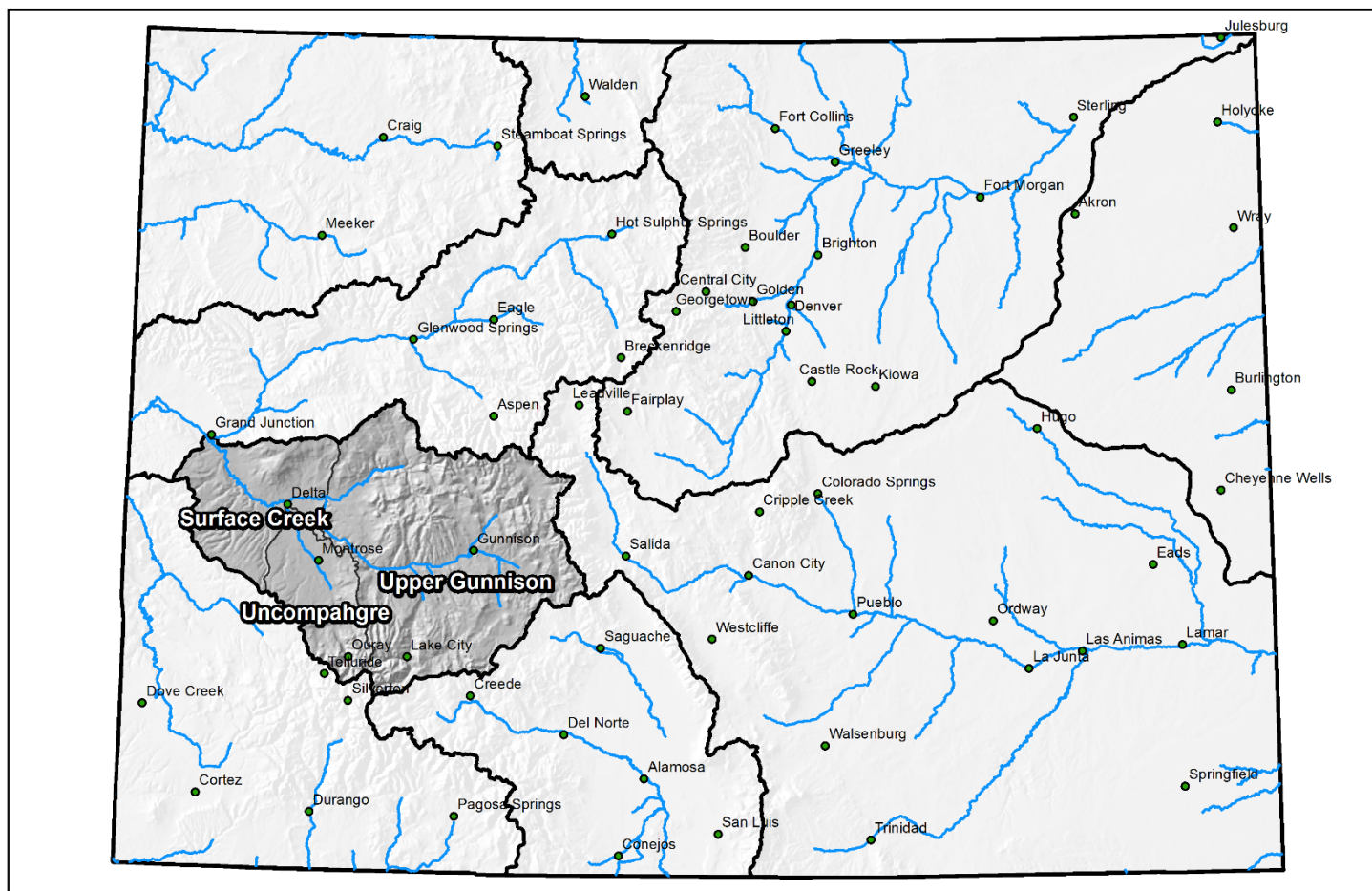


SOUTH PLATTE RIVER BASIN Reservoir Storage Departure from Average



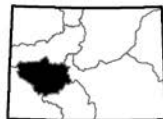
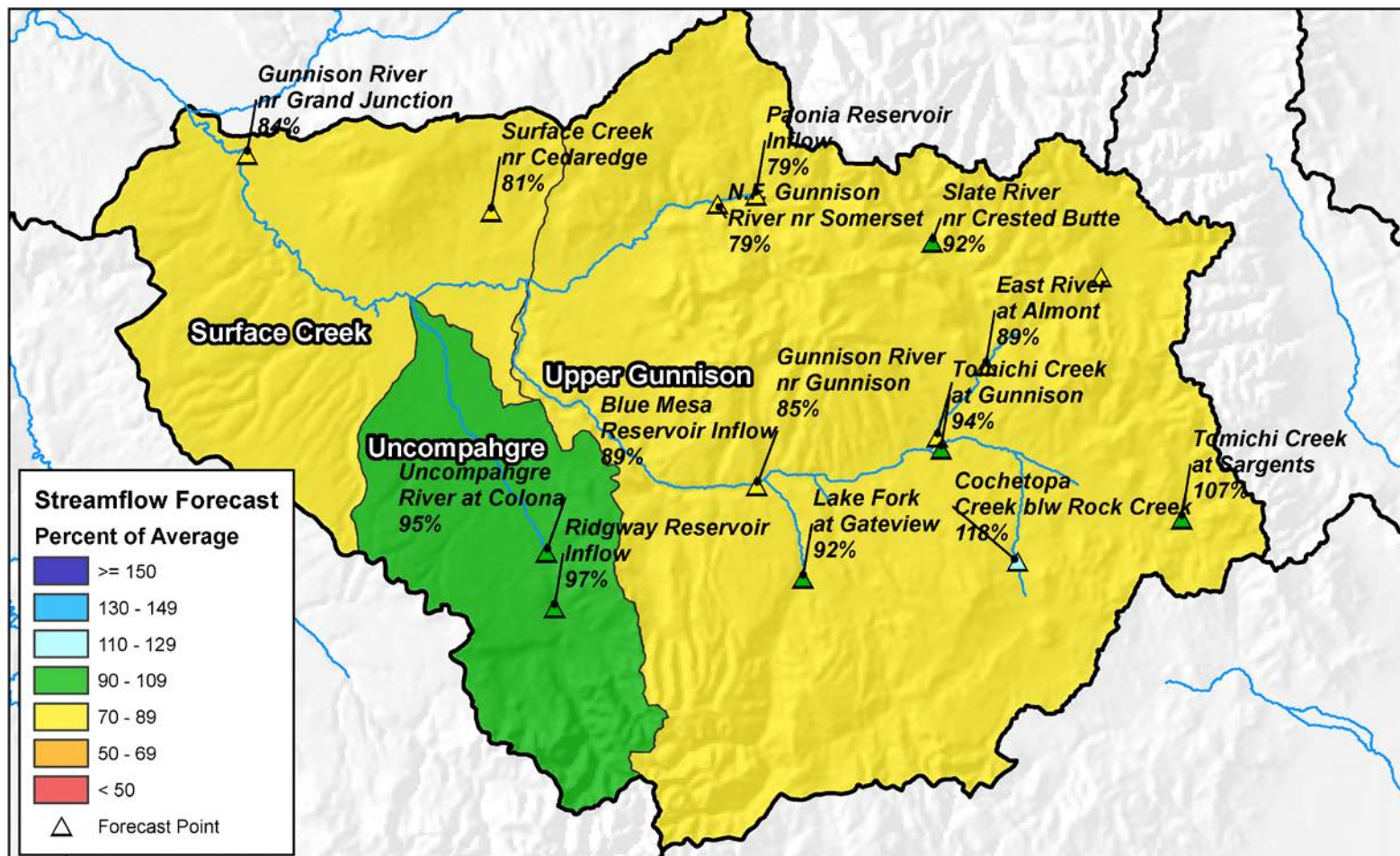
Major Basin Summary

Gunnison River Basin



Gunnison River Basin Water Supply Forecast Summary

June 1, 2016

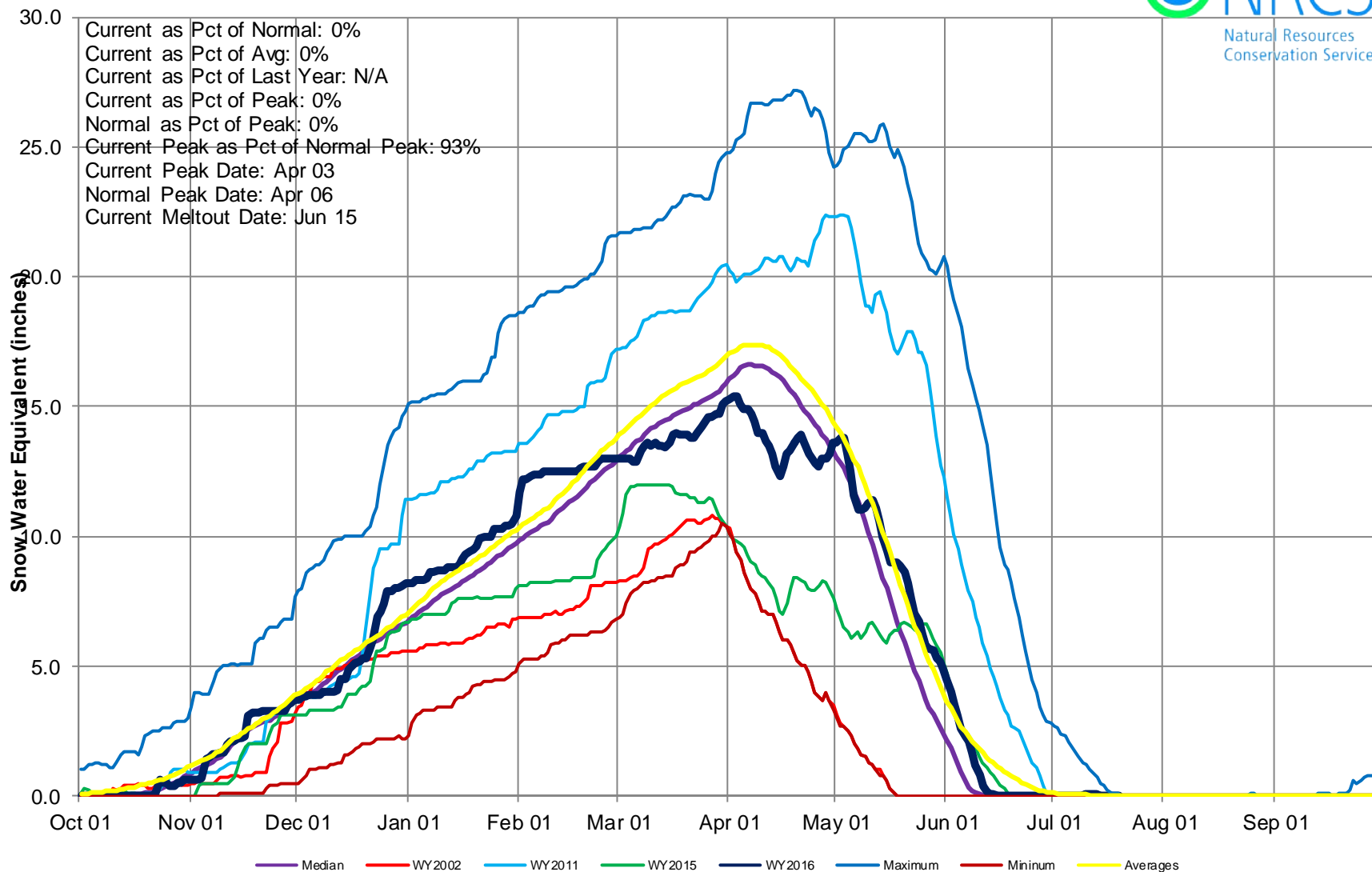


0 5 10 20 30 40 Miles



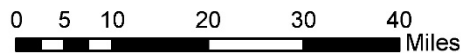
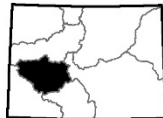
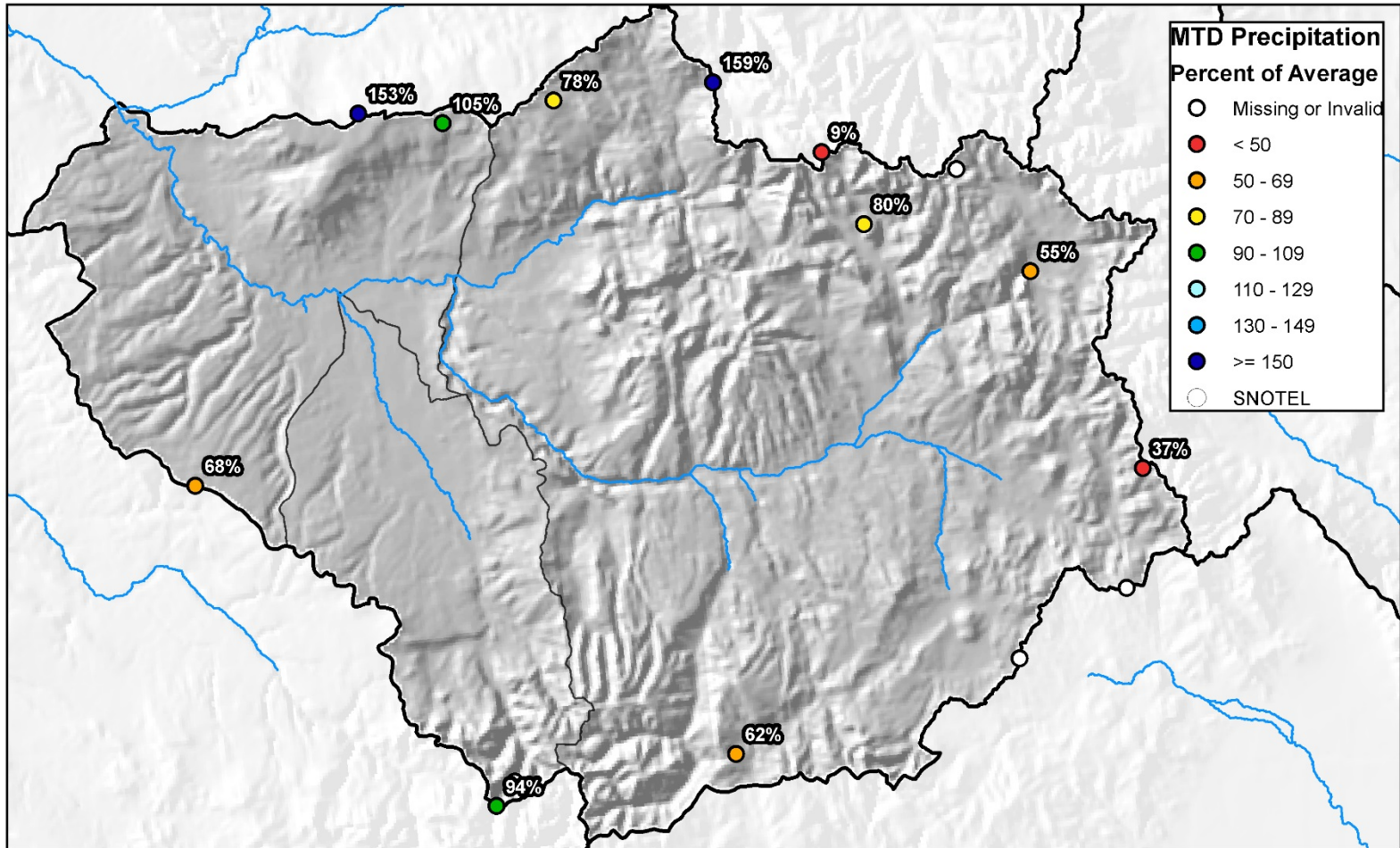
Gunnison River Basin High/Low Snowpack Summary

Based on Provisional SNOTEL data as of Jul 19, 2016



Gunnison River Basin Month to Date Precipitation Summary

Current as of Jul 19, 2016



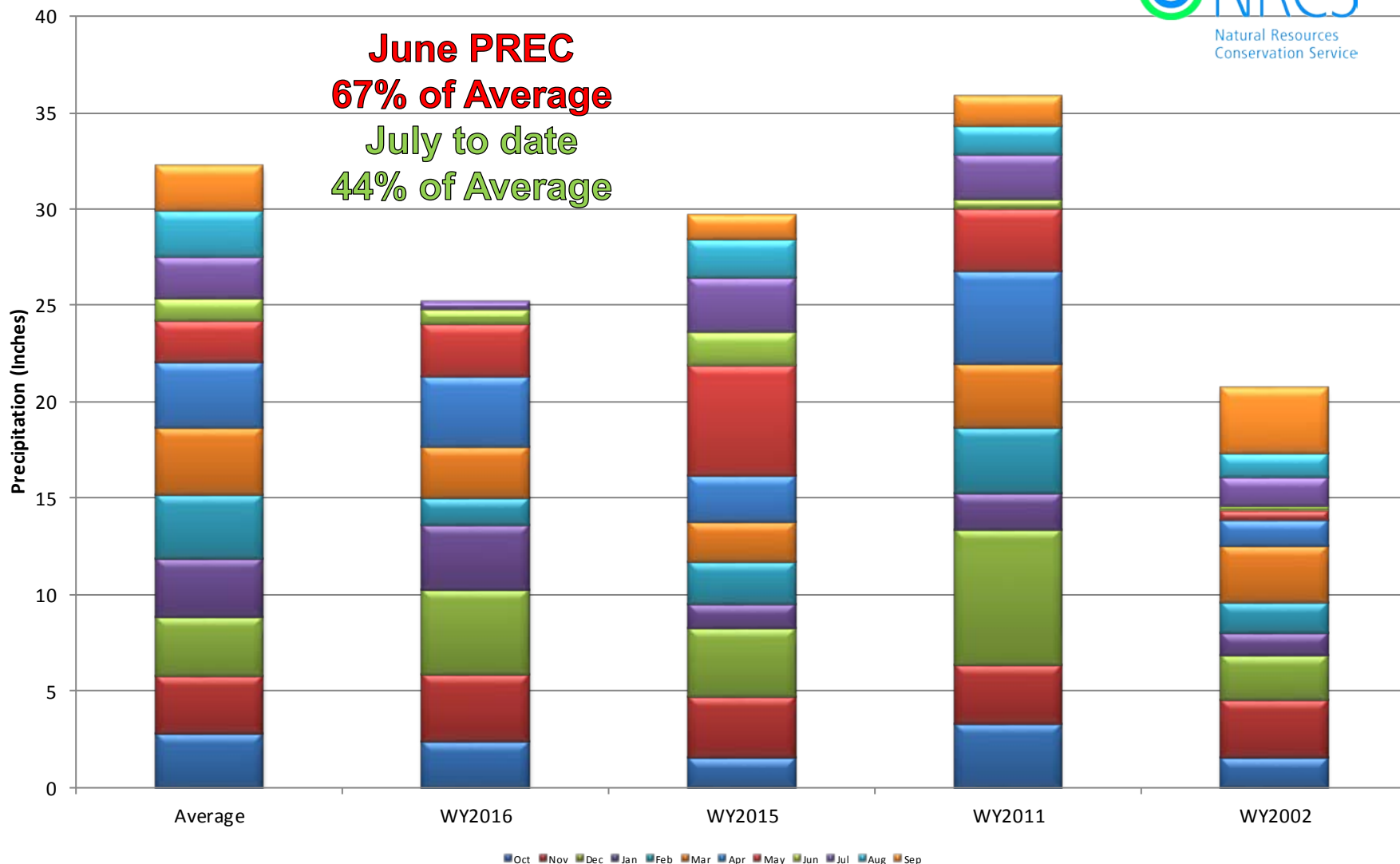


Gunnison River Basin High/Low Monthly Precipitation Summary

Based on Provisional SNOTEL data as of Jul 19, 2016



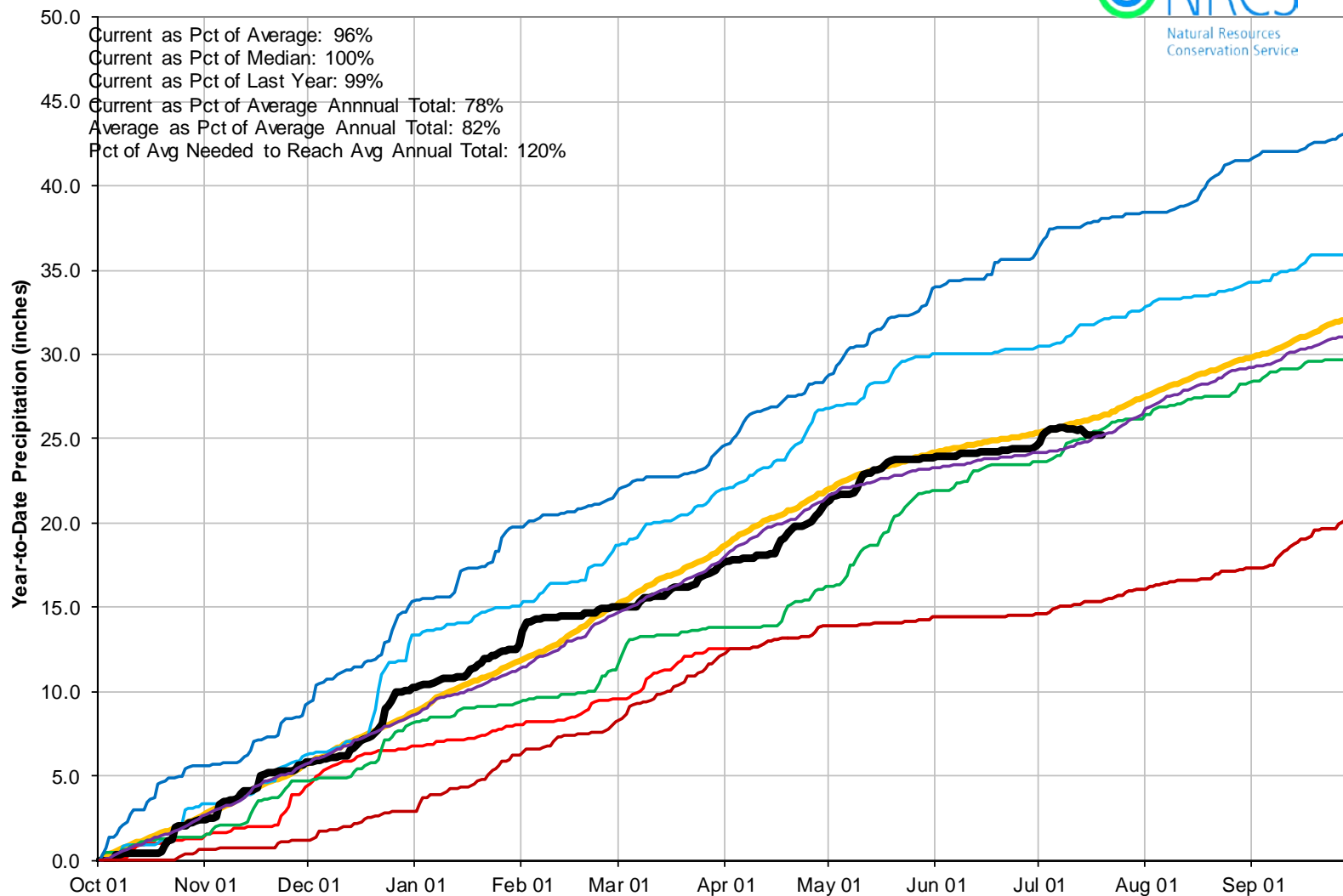
June PREC
67% of Average
July to date
44% of Average



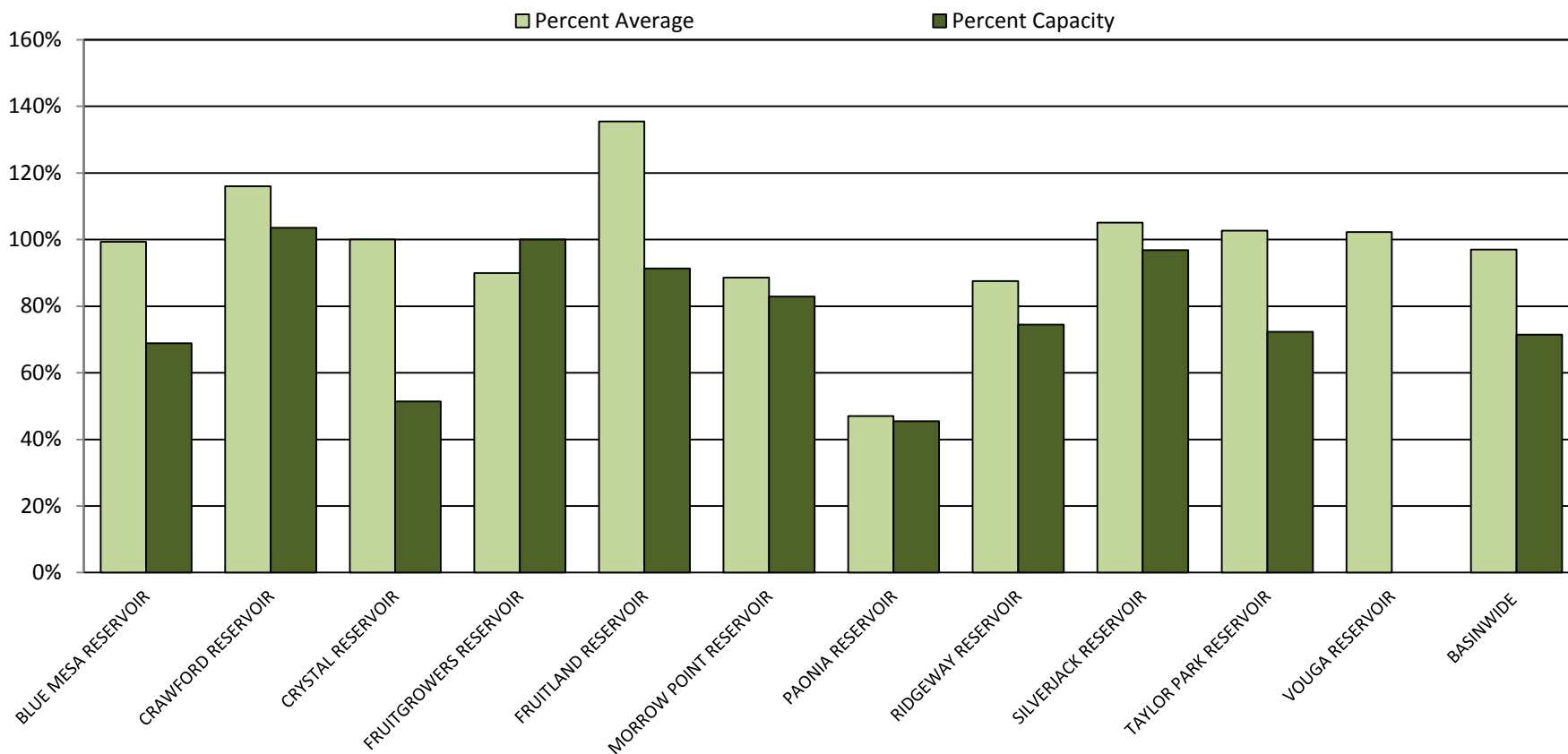


Gunnison River Basin High/Low Year-to-Date Precipitation Summary

Based on Provisional SNOTEL data as of Jul 19, 2016



Reservoir Storage

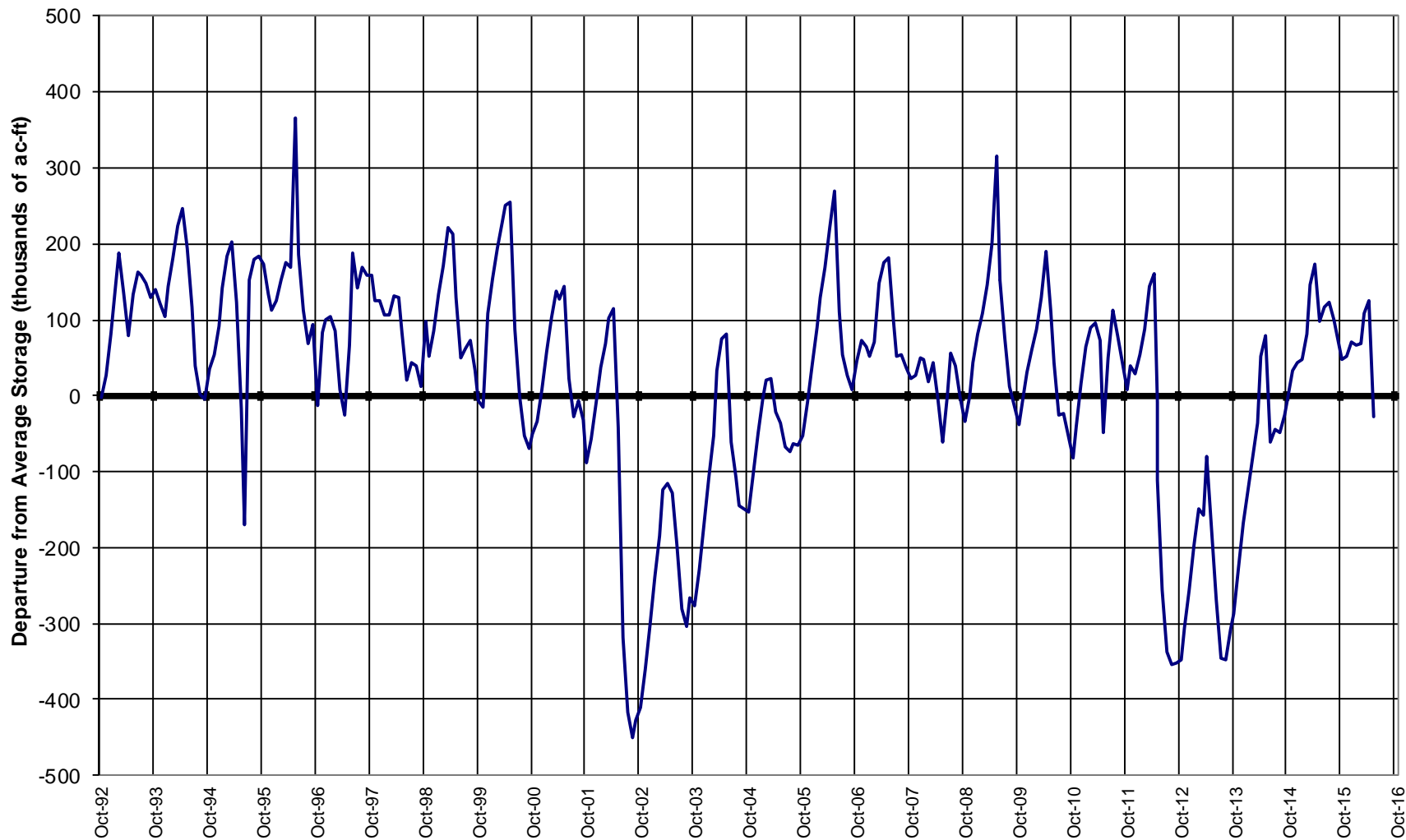




GUNNISON RIVER BASIN

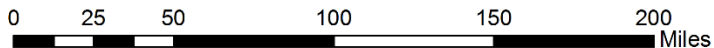
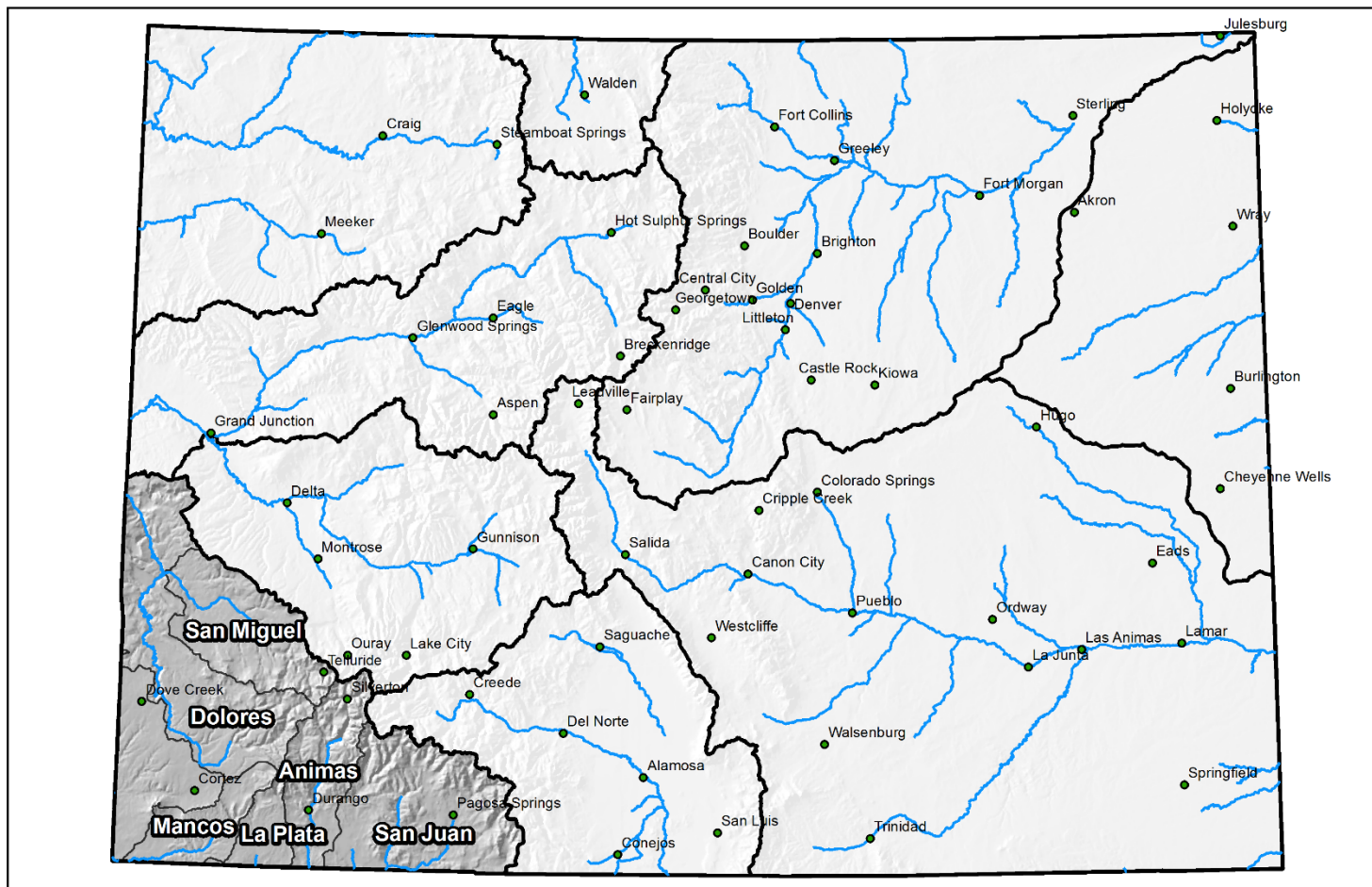
Reservoir Storage

Departure from Average



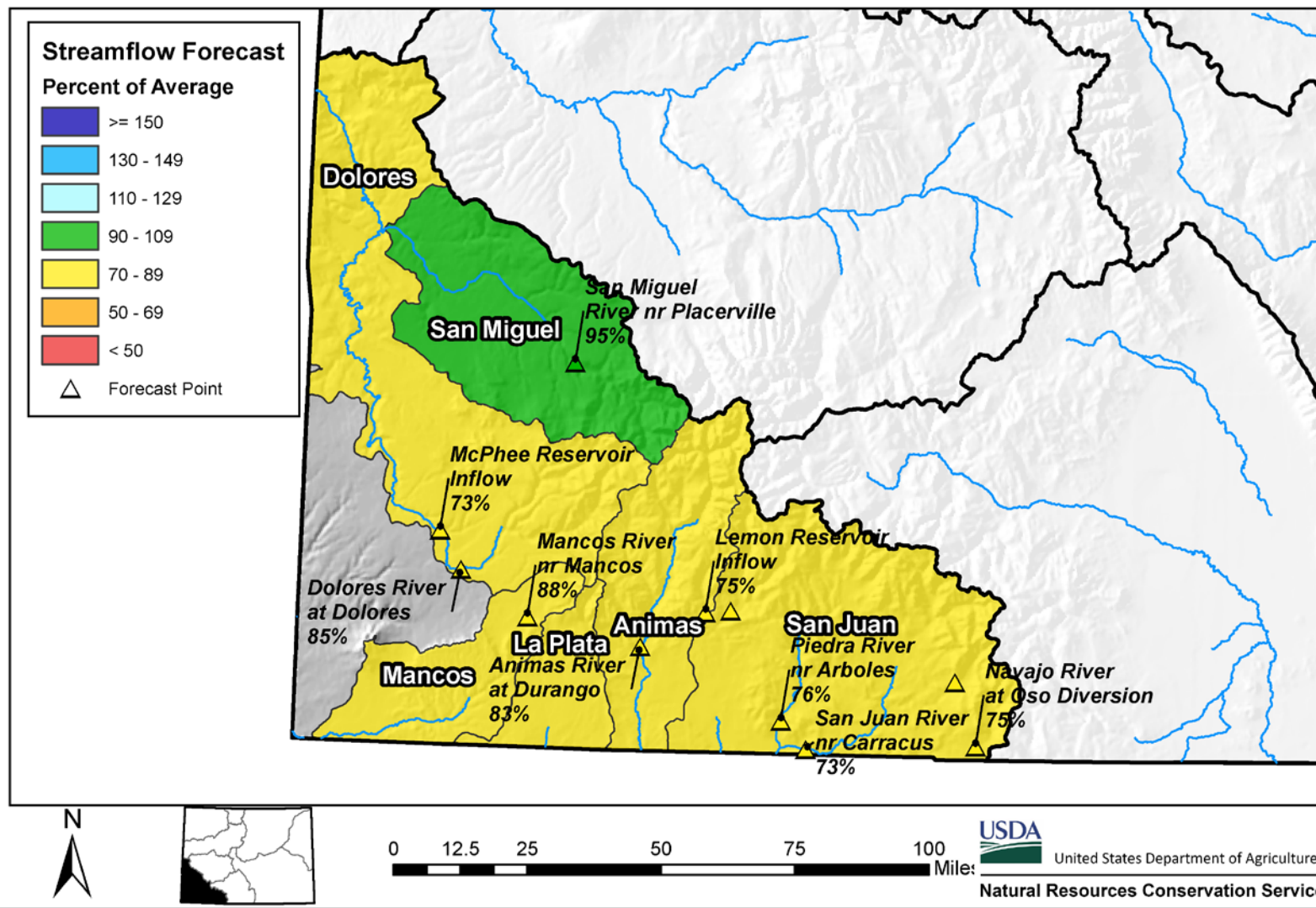
Major Basin Summary

San Miguel, Dolores, Animas, and San Juan River Basins



San Miguel, Dolores, Animas, and San Juan River Basins Streamflow Forecast Summary

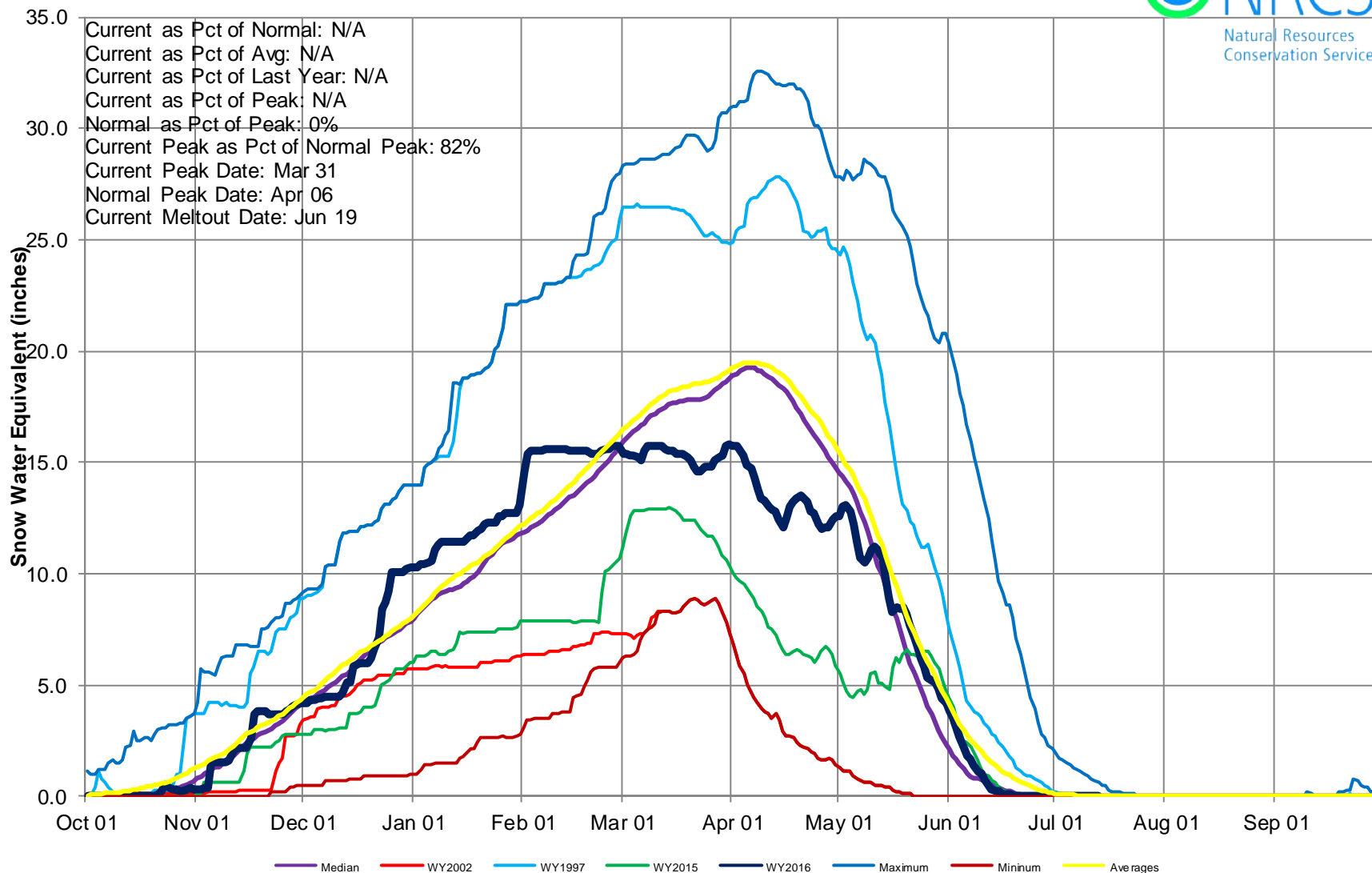
June 1, 2016





San Miguel, Dolores, Animas and San Juan River Basins High/Low Snowpack Summary

Based on Provisional SNOTEL data as of Jul 19, 2016

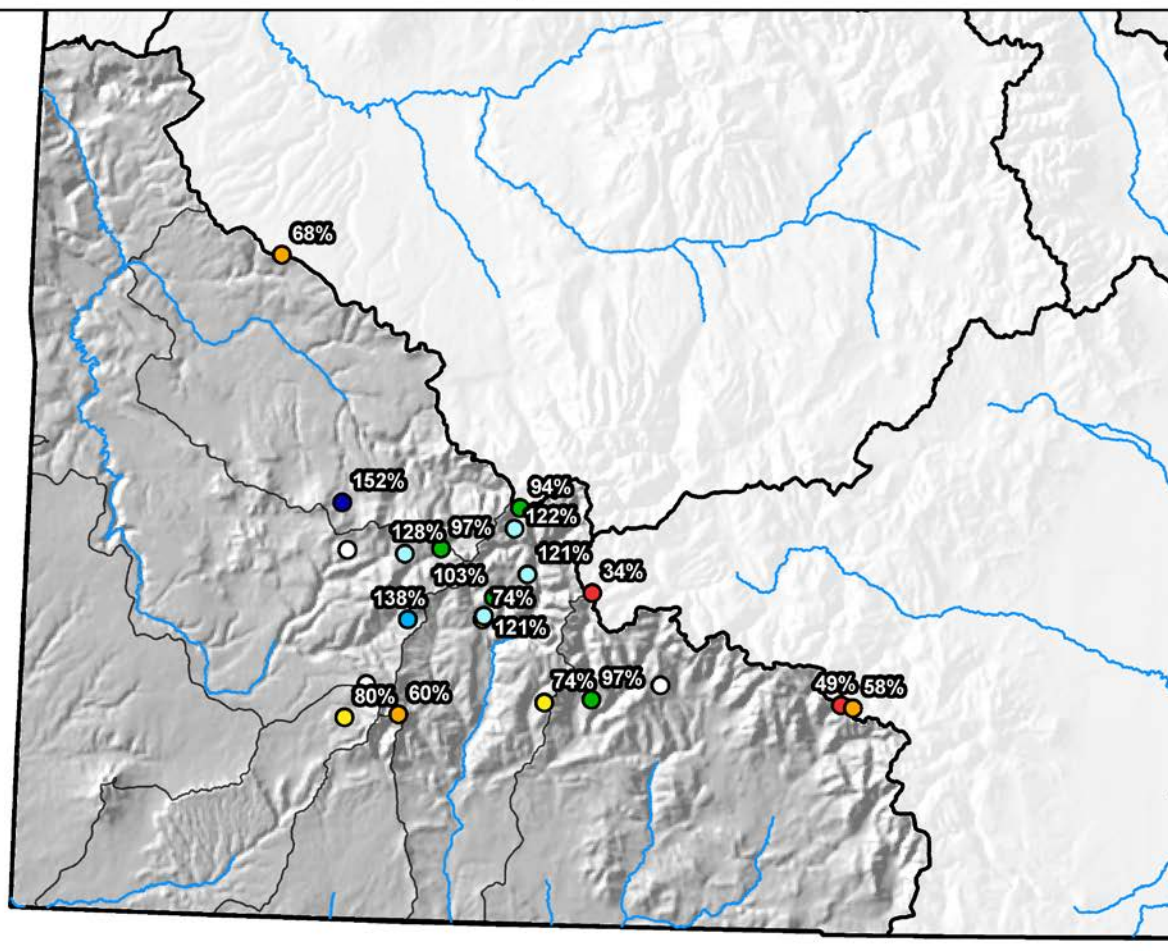


San Miguel, Dolores, Animas, and San Juan River Basins Month to Date Precipitation Summary

Current as of Jul 19, 2016

MTD Precipitation Percent of Average

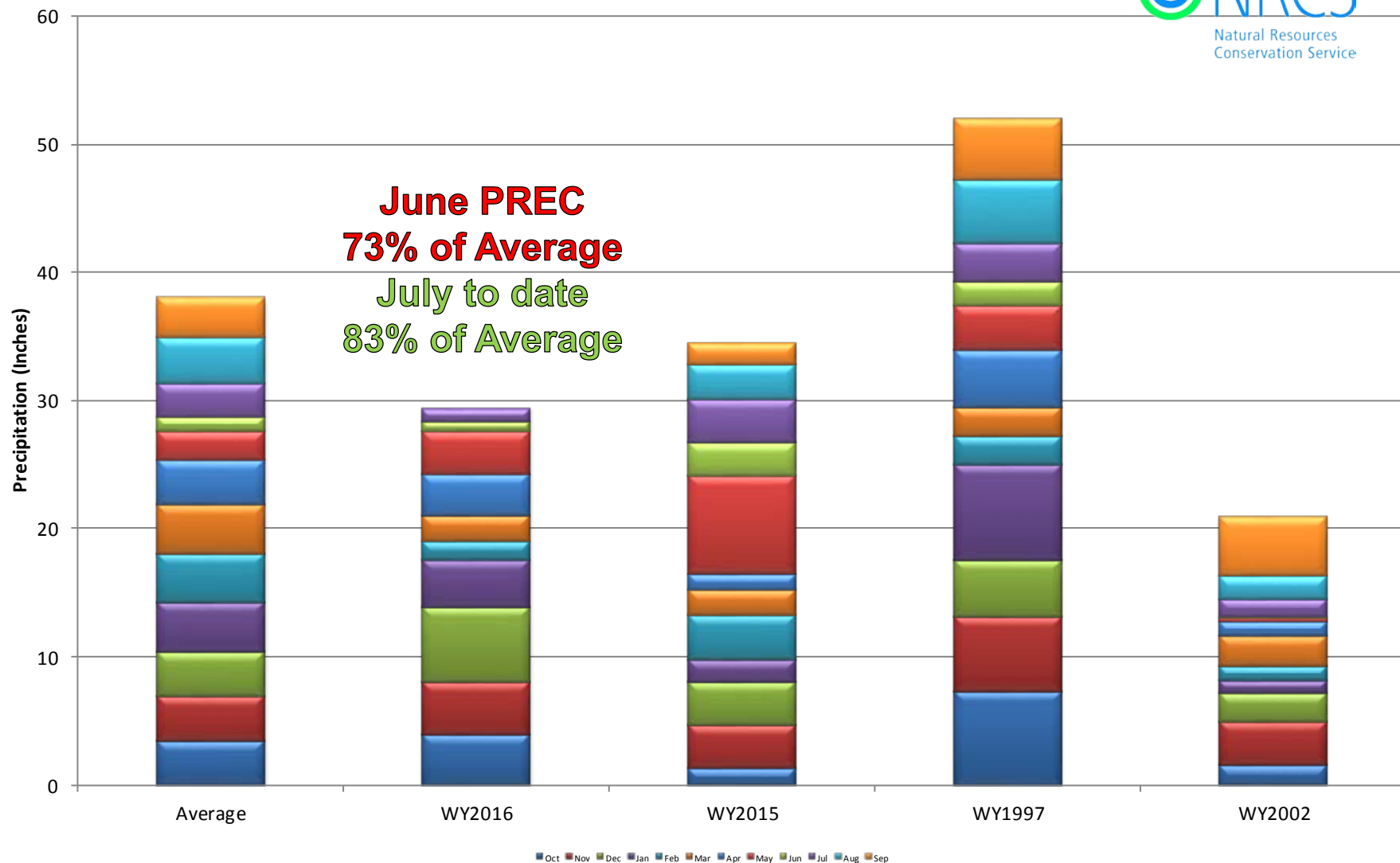
- Missing or Invalid
- < 50
- 50 - 69
- 70 - 89
- 90 - 109
- 110 - 129
- 130 - 149
- ≥ 150
- SNOTEL



0 10 20 40 60 80 Miles



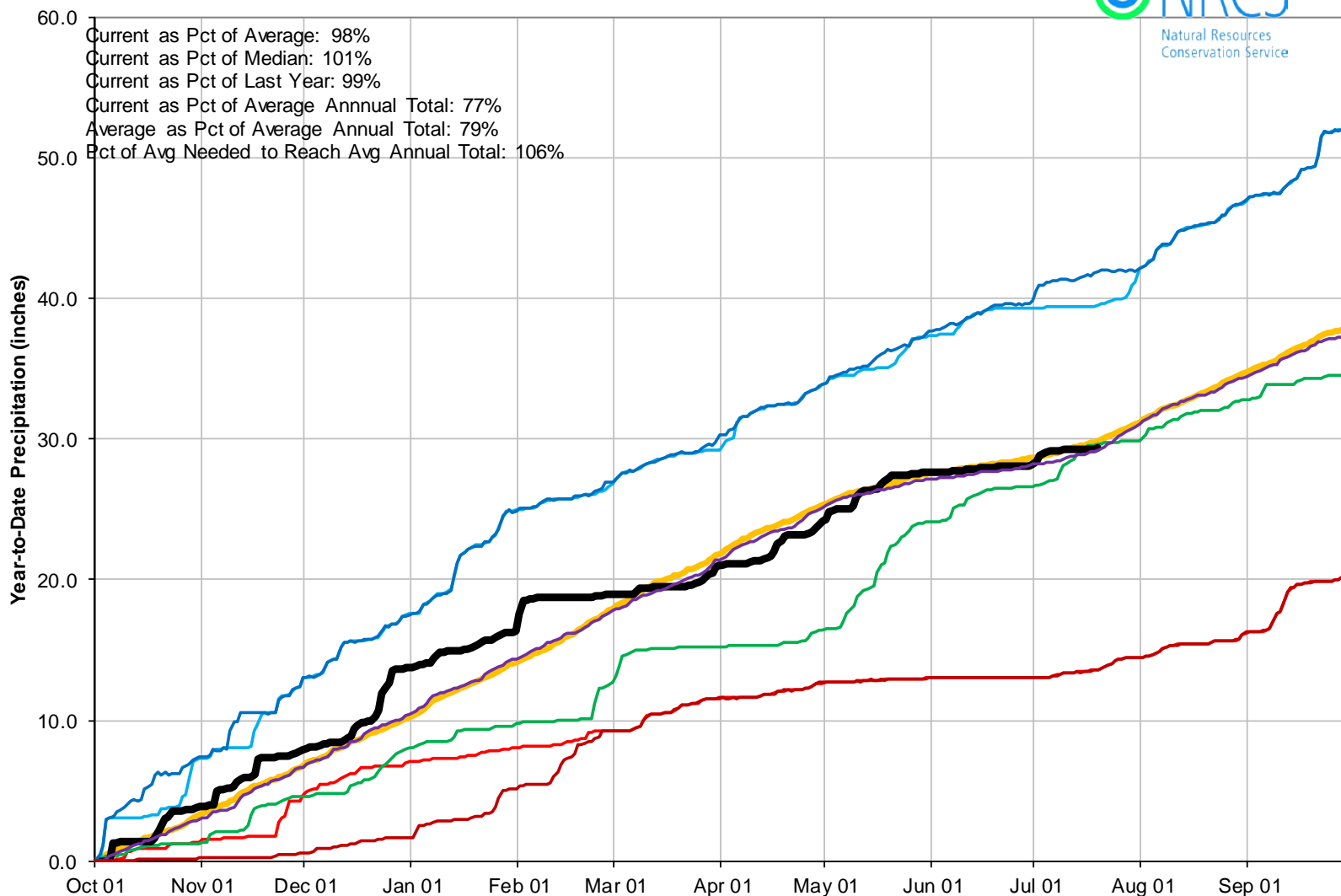
San Miguel, Dolores, Animas & San Juan River Basins High/Low Monthly Precipitation Summary



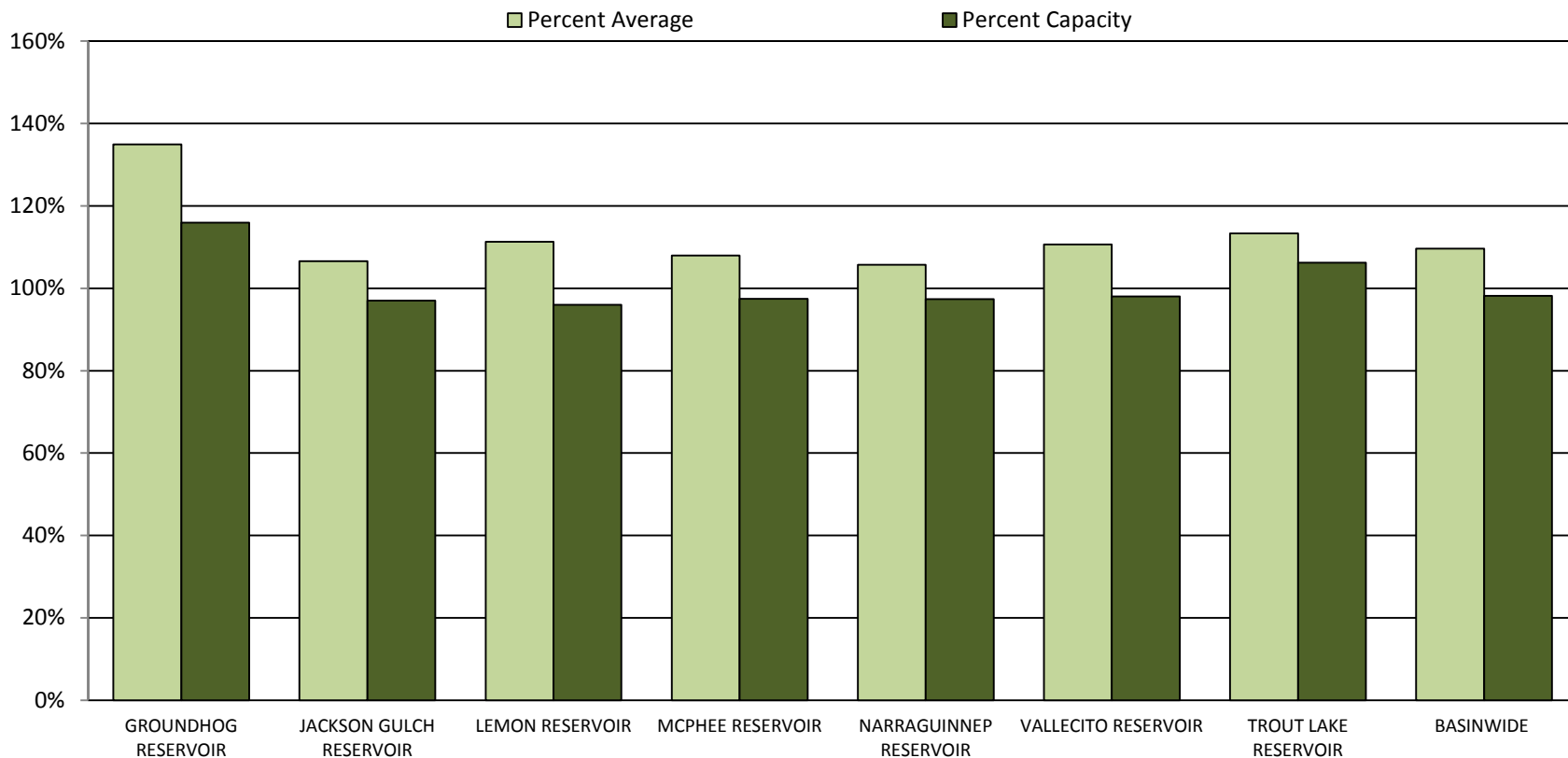


San Miguel, Dolores, Animas & San Juan River Basins High/Low Year-to-Date Precipitation Summary

Based on Provisional SNOTEL data as of Jul 19, 2016



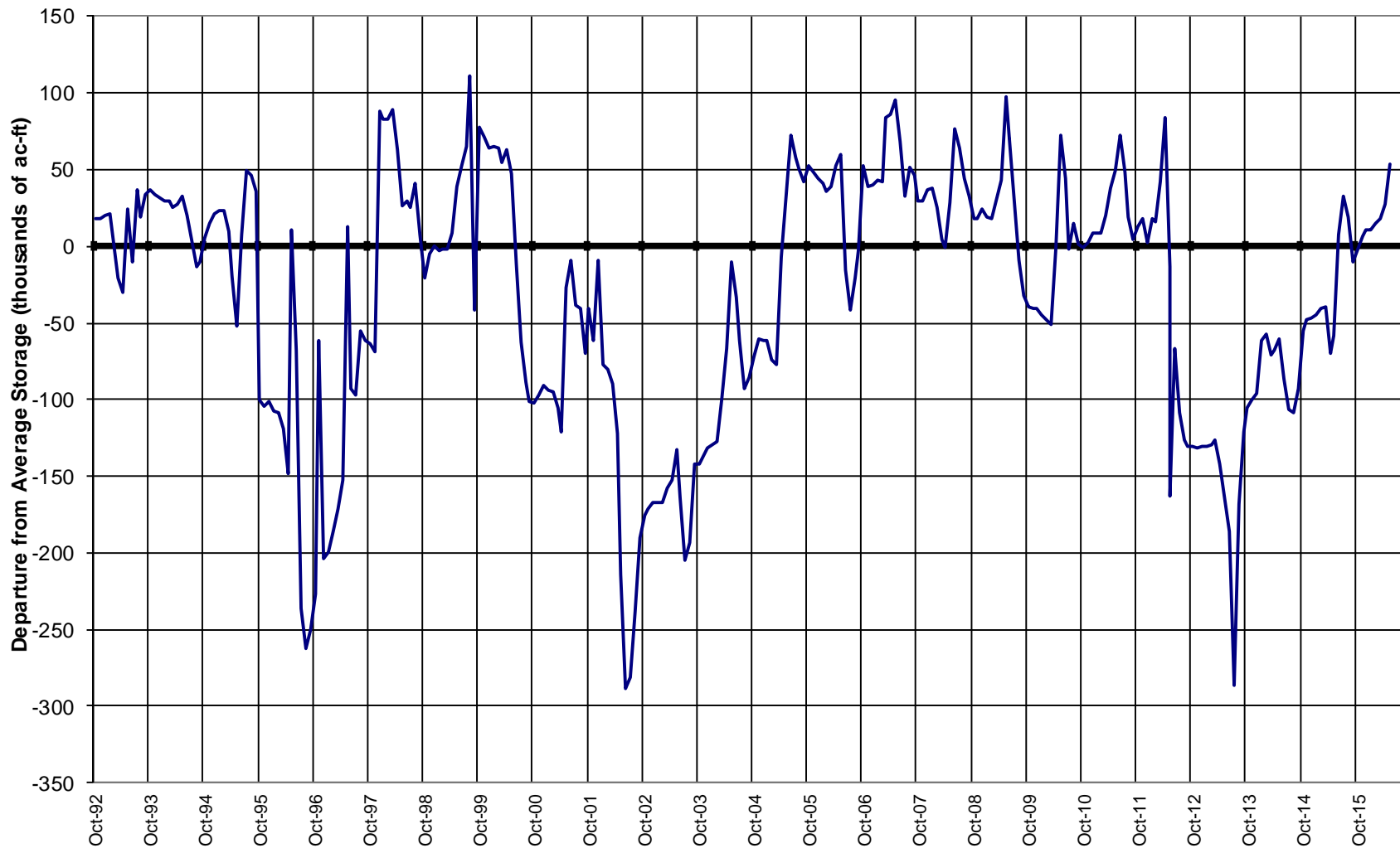
Reservoir Storage





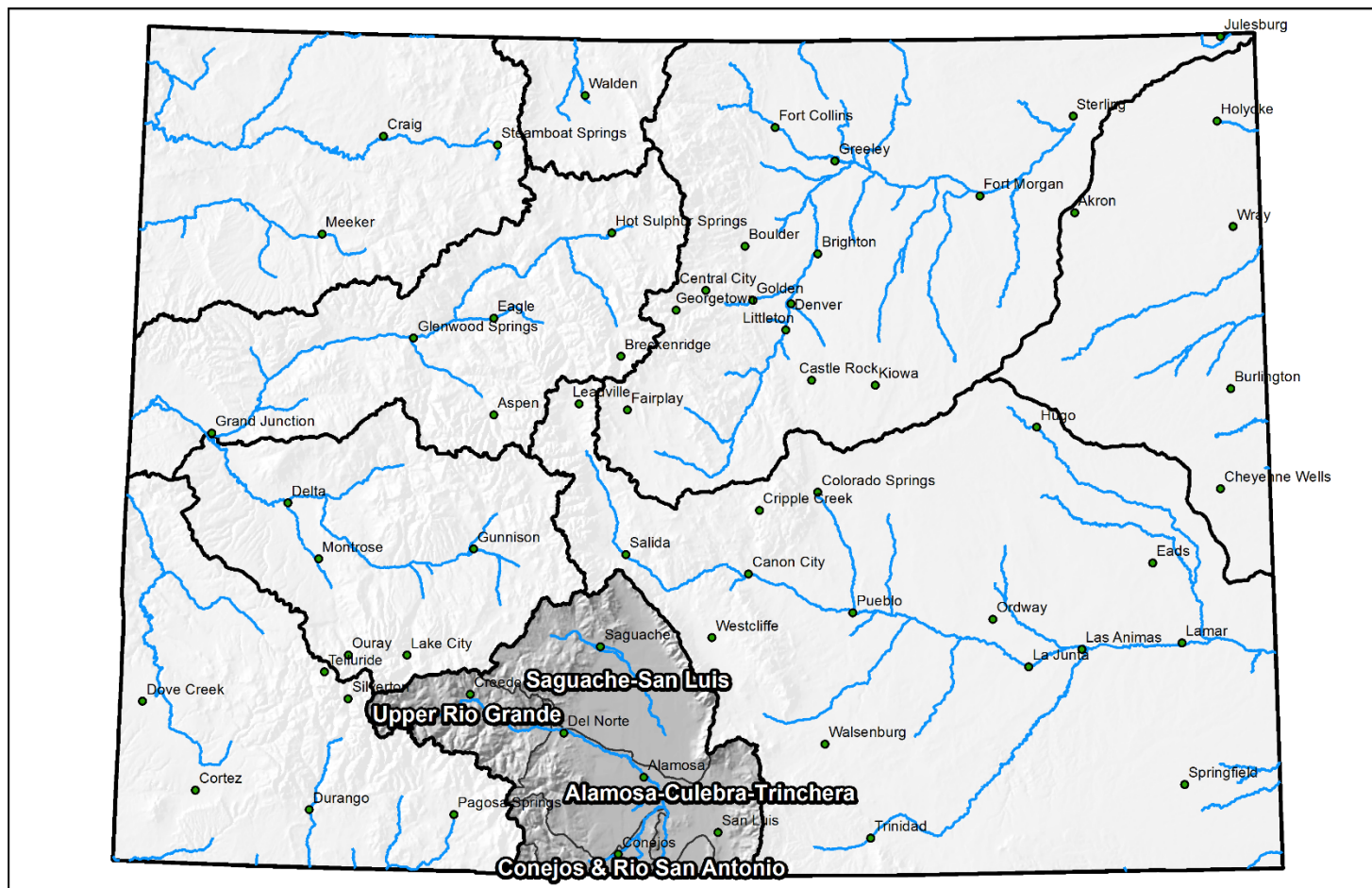
SAN MIGUEL, DOLORES, ANIMAS AND SAN JUAN RIVER BASINS

Reservoir Storage
Departure from Average



Major Basin Summary

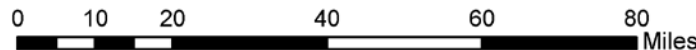
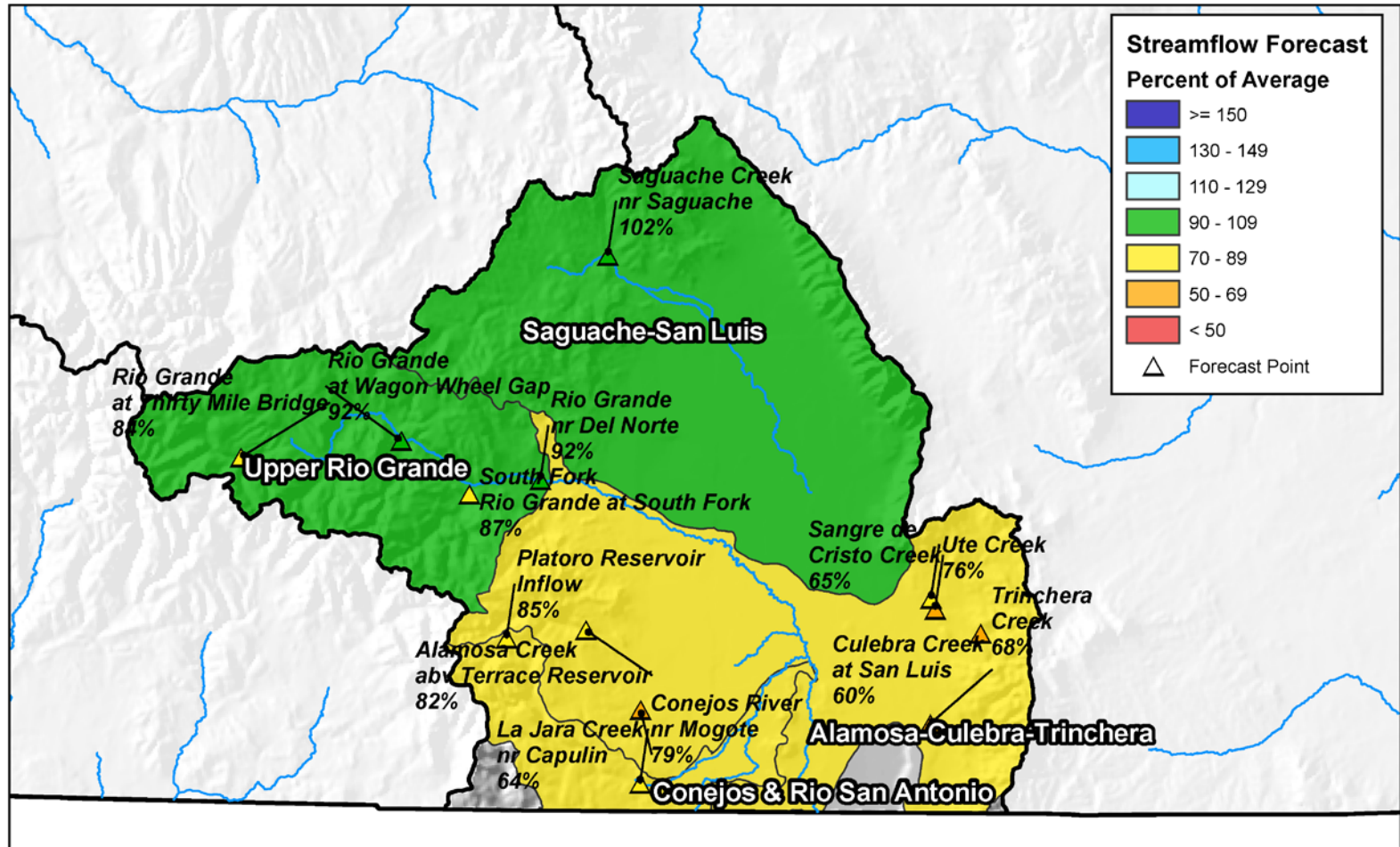
Upper Rio Grande River Basin



0 25 50 100 150 200 Miles

Upper Rio Grande River Basin Streamflow Forecast Summary

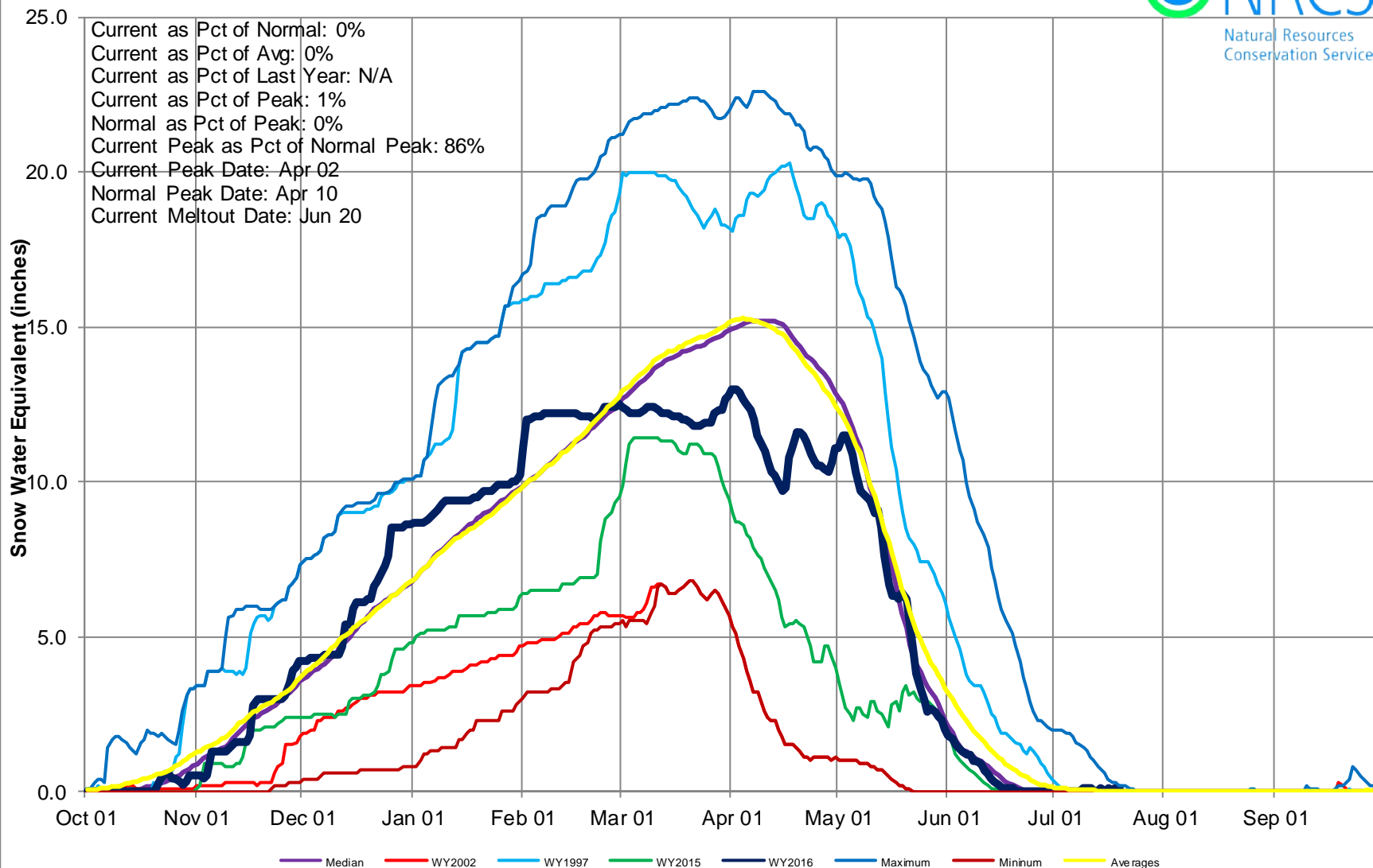
June 1, 2016





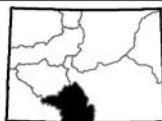
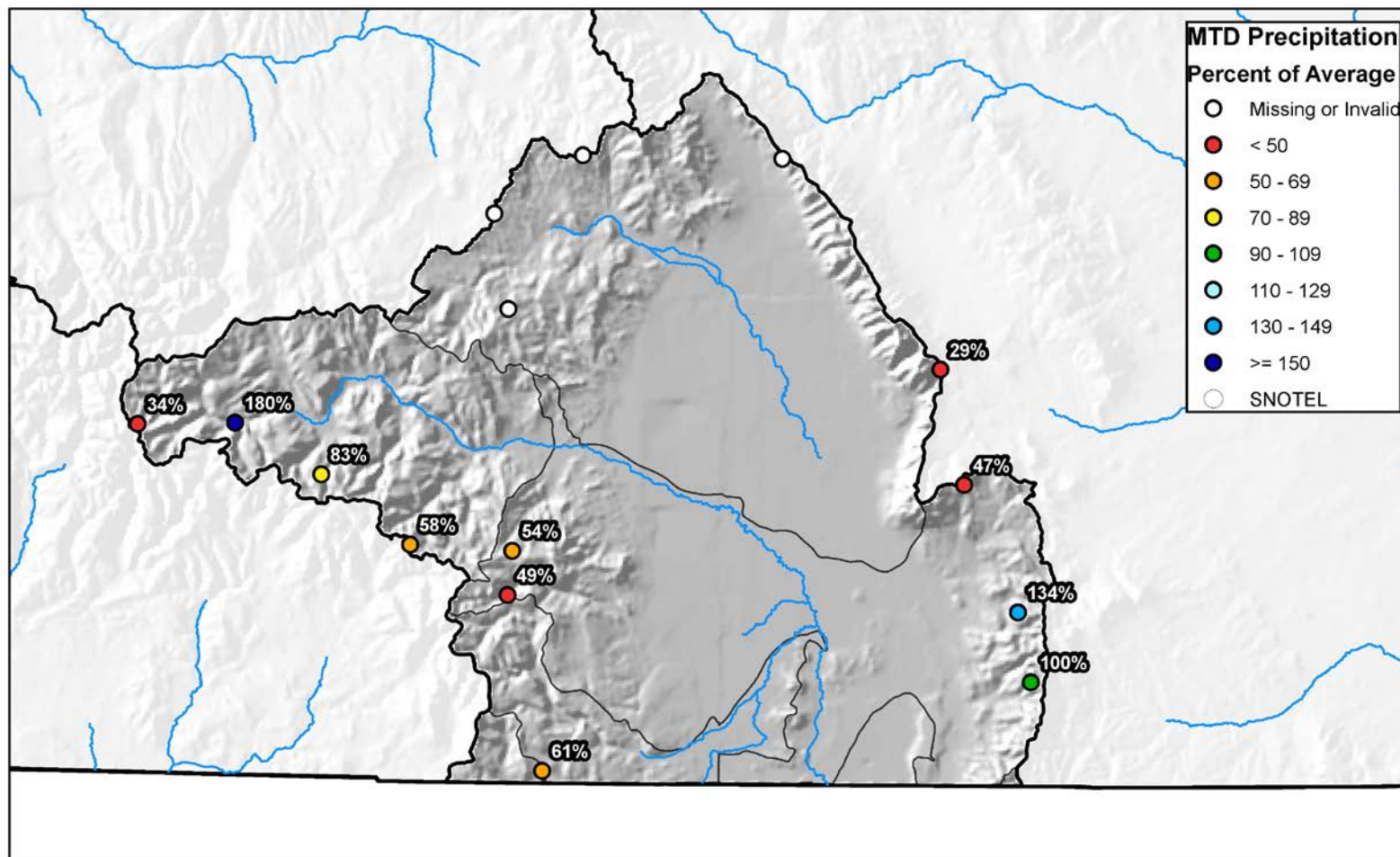
Upper Rio Grande Basin High/Low Snowpack Summary

Based on Provisional SNOTEL data as of Jul 19, 2016



Upper Rio Grande River Basin Month to Date Precipitation Summary

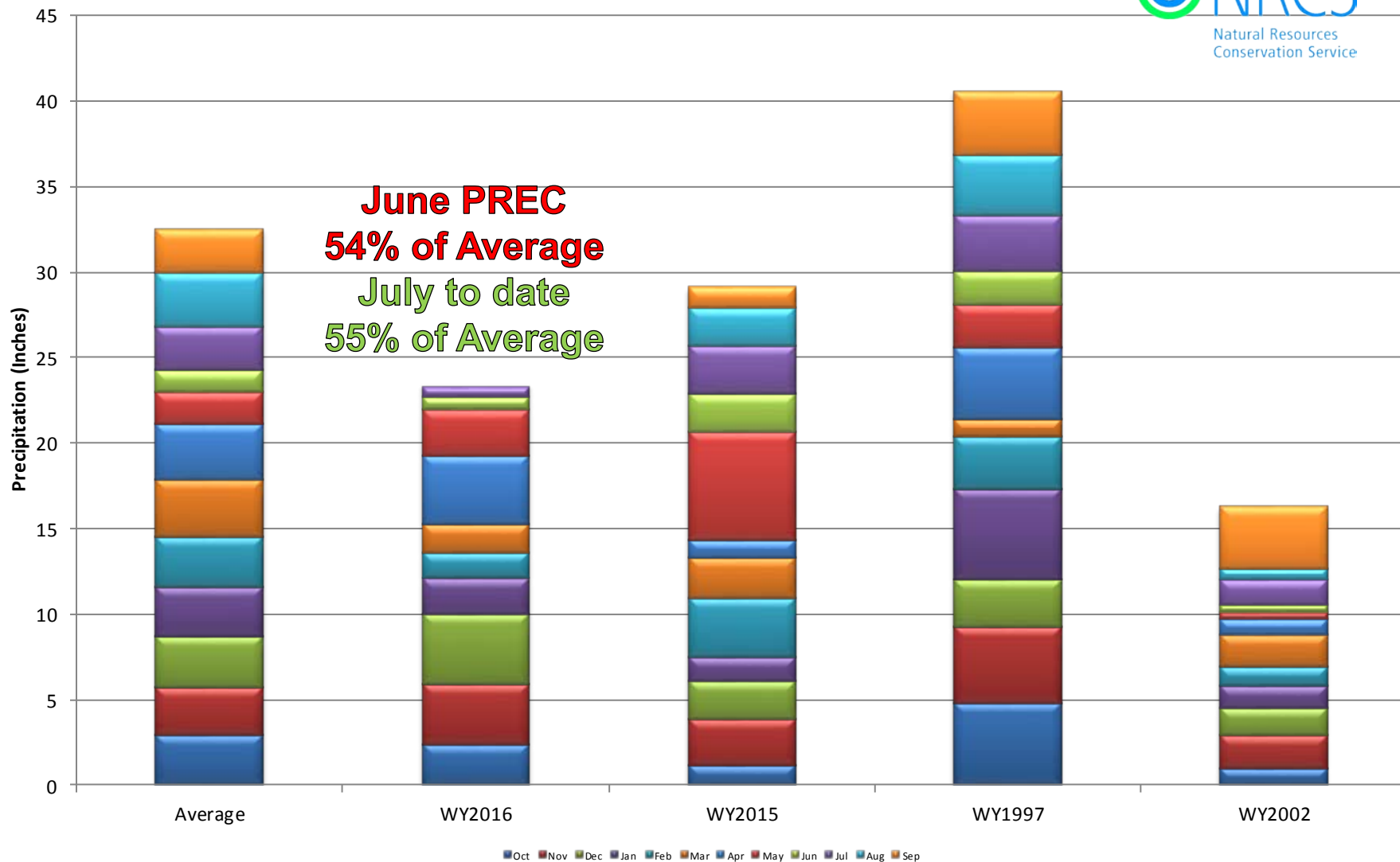
Current as of Jul 19, 2016





Upper Rio Grande Basin High/Low Monthly Precipitation Summary

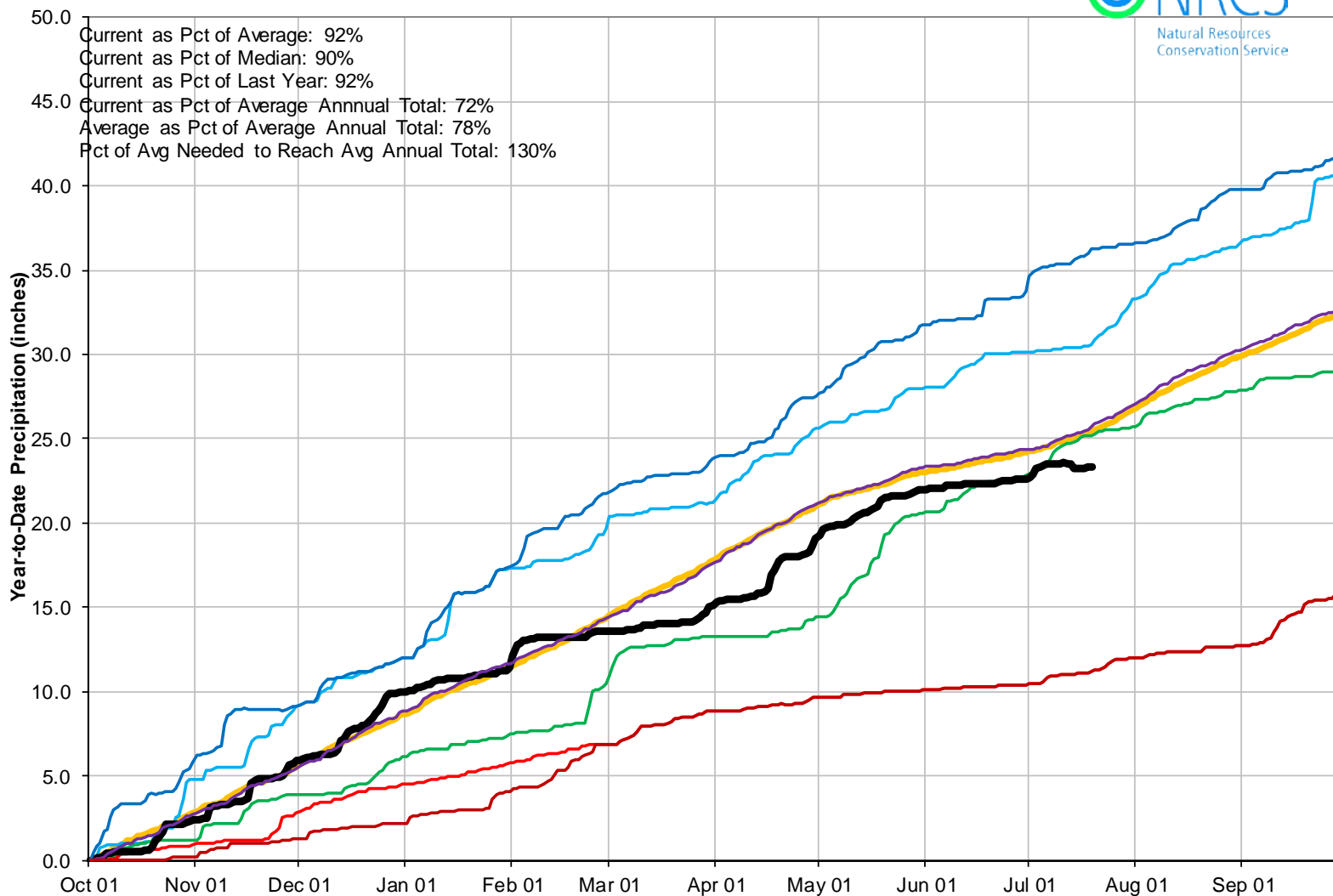
Based on Provisional SNOTEL data as of Jul 19, 2016

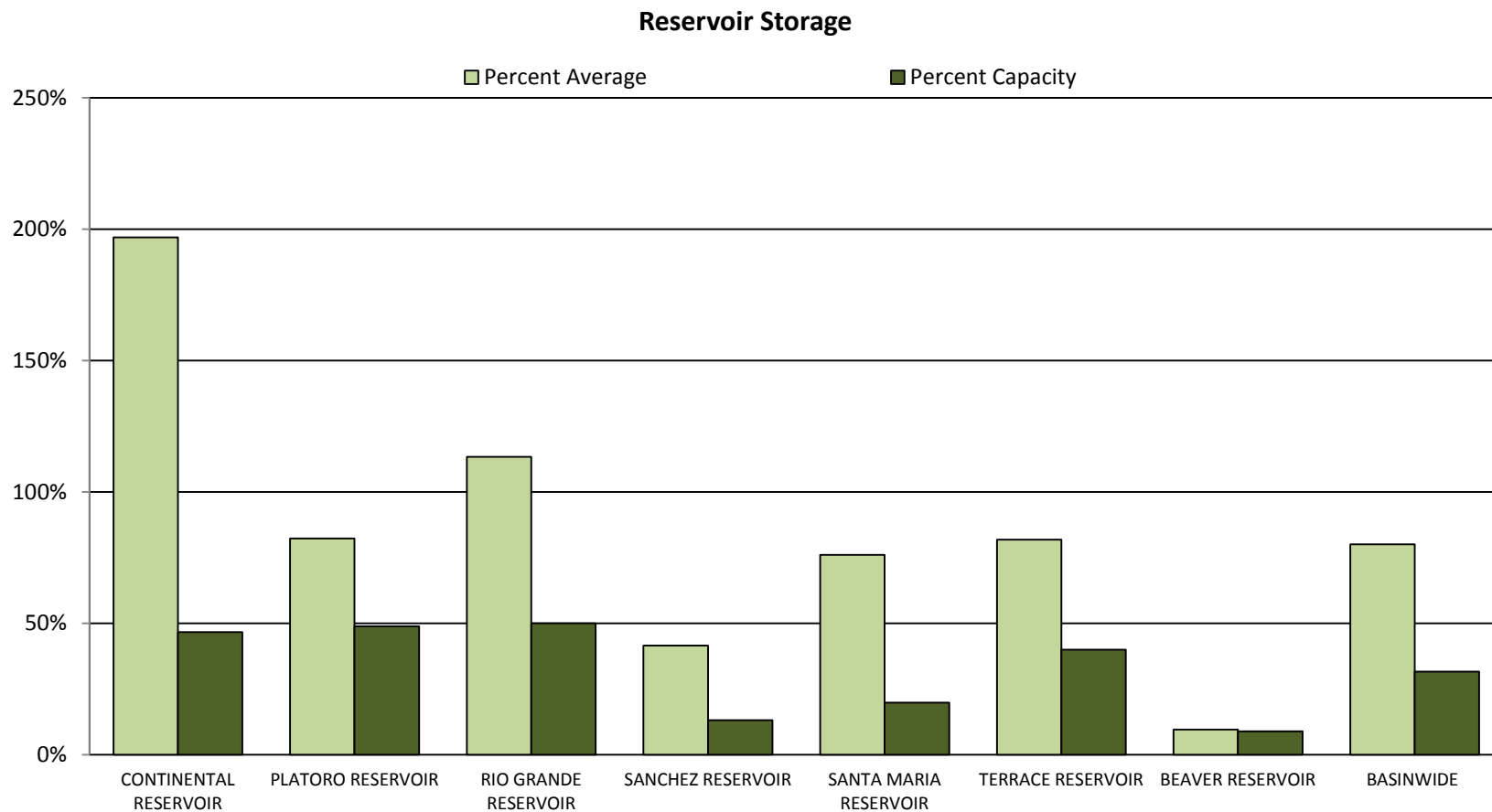




Upper Rio Grande Basin High/Low Year-to-Date Precipitation Summary

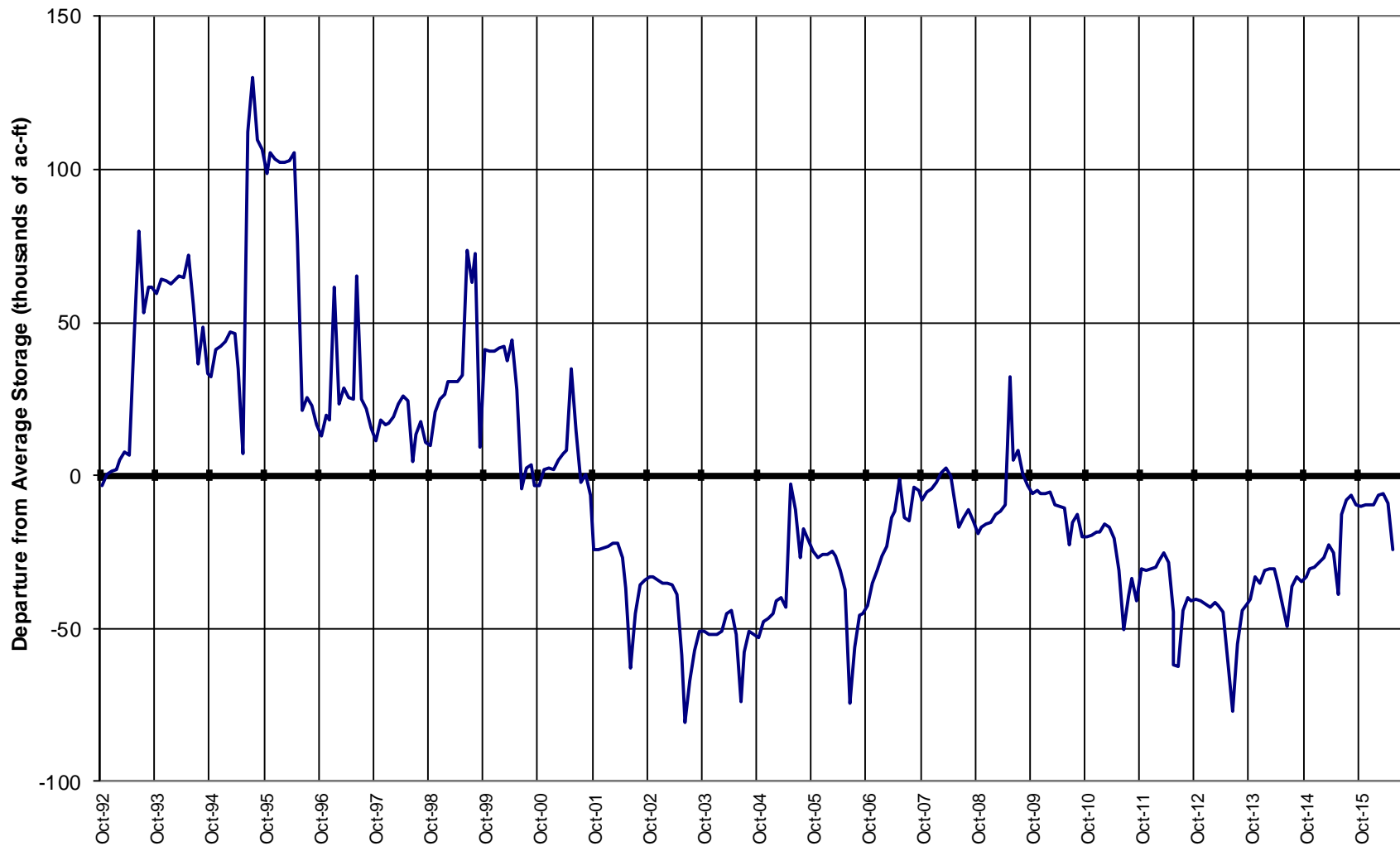
Based on Provisional SNOTEL data as of Jul 19, 2016





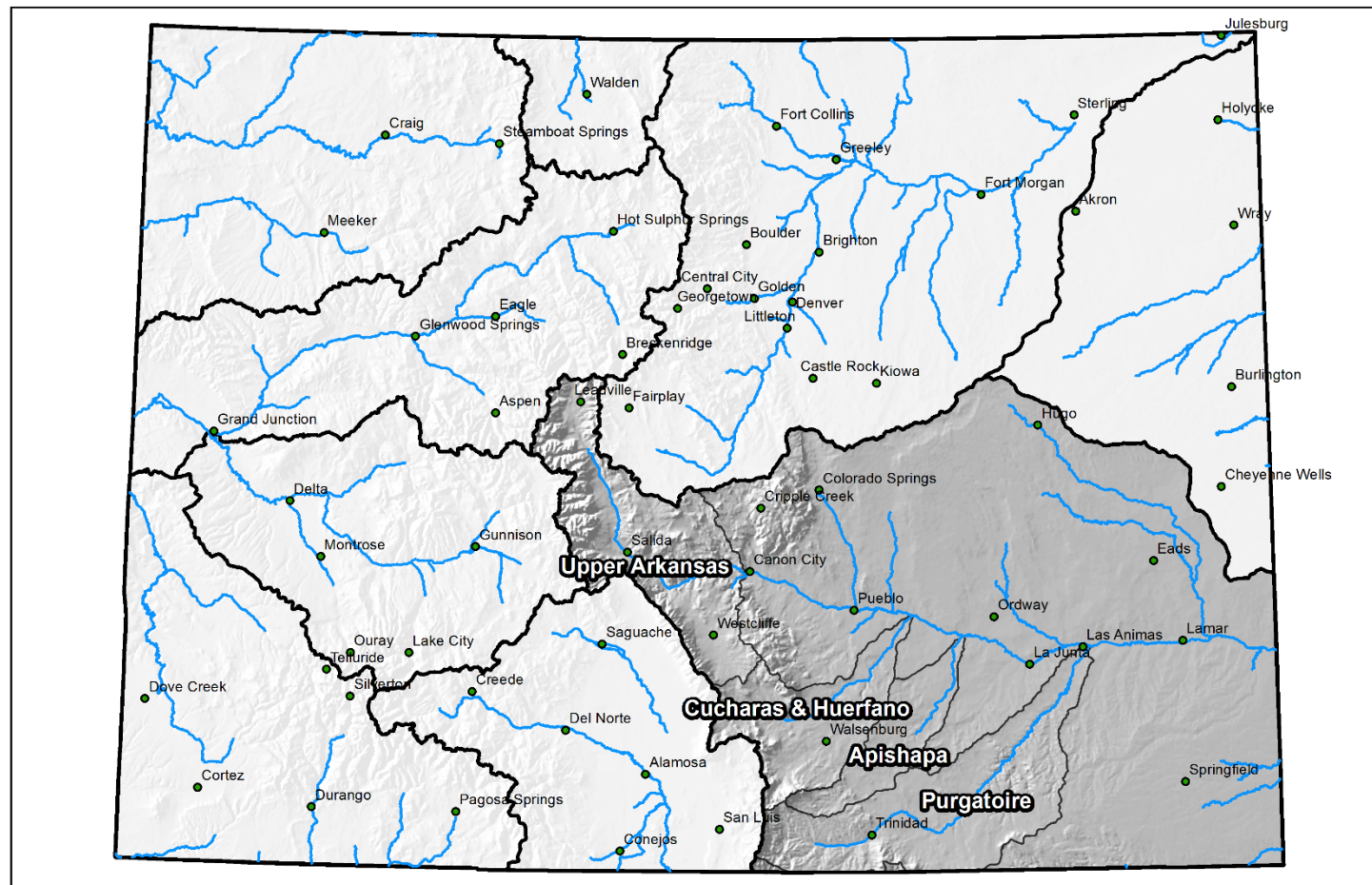


UPPER RIO GRANDE BASIN Reservoir Storage Departure from Average



Major Basin Summary

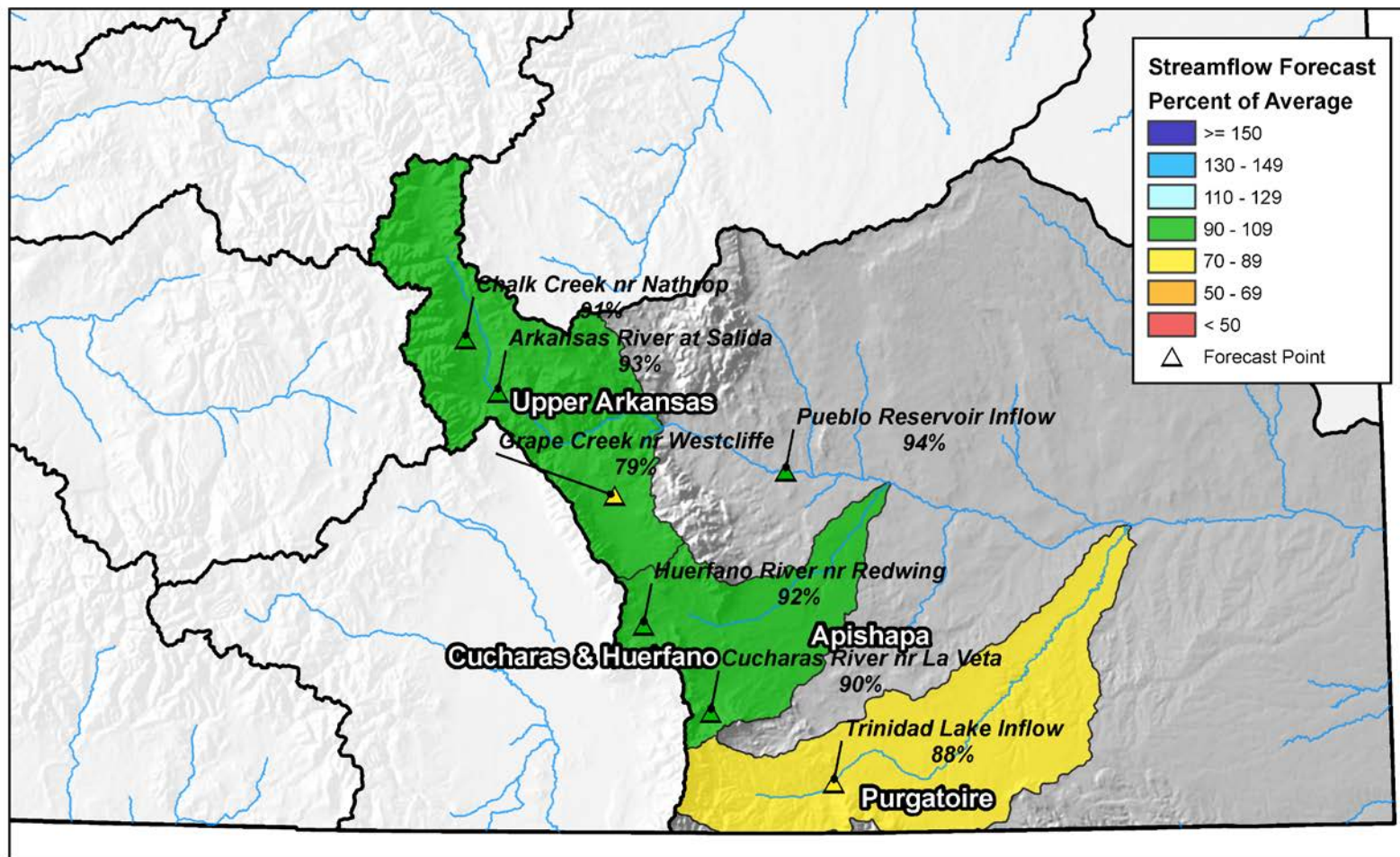
Arkansas River Basin



0 25 50 100 150 200 Miles

Arkansas River Basin Streamflow Forecast Summary

June 1, 2016

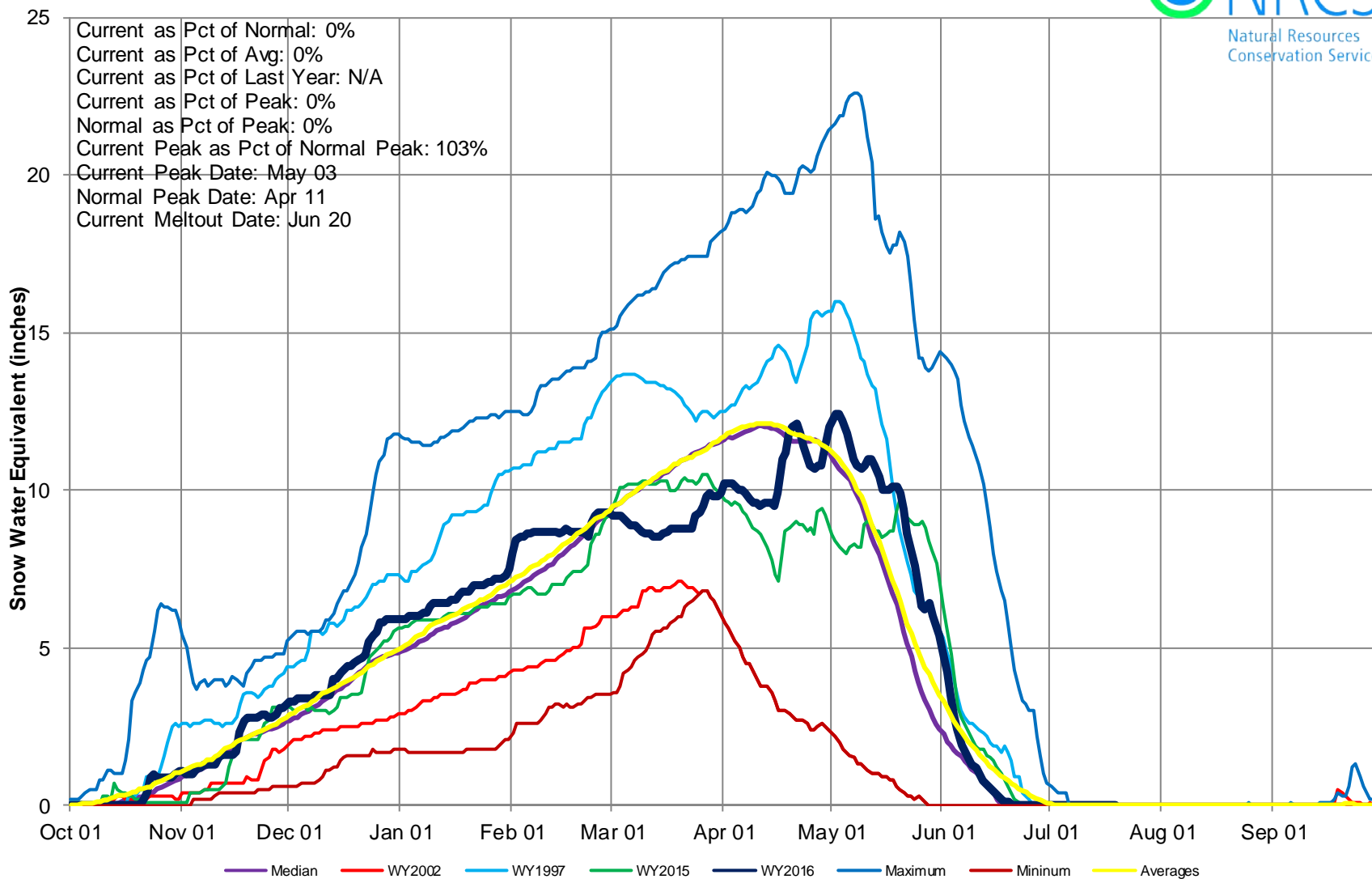


0 10 20 40 60 80 Miles



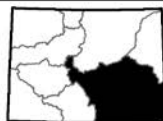
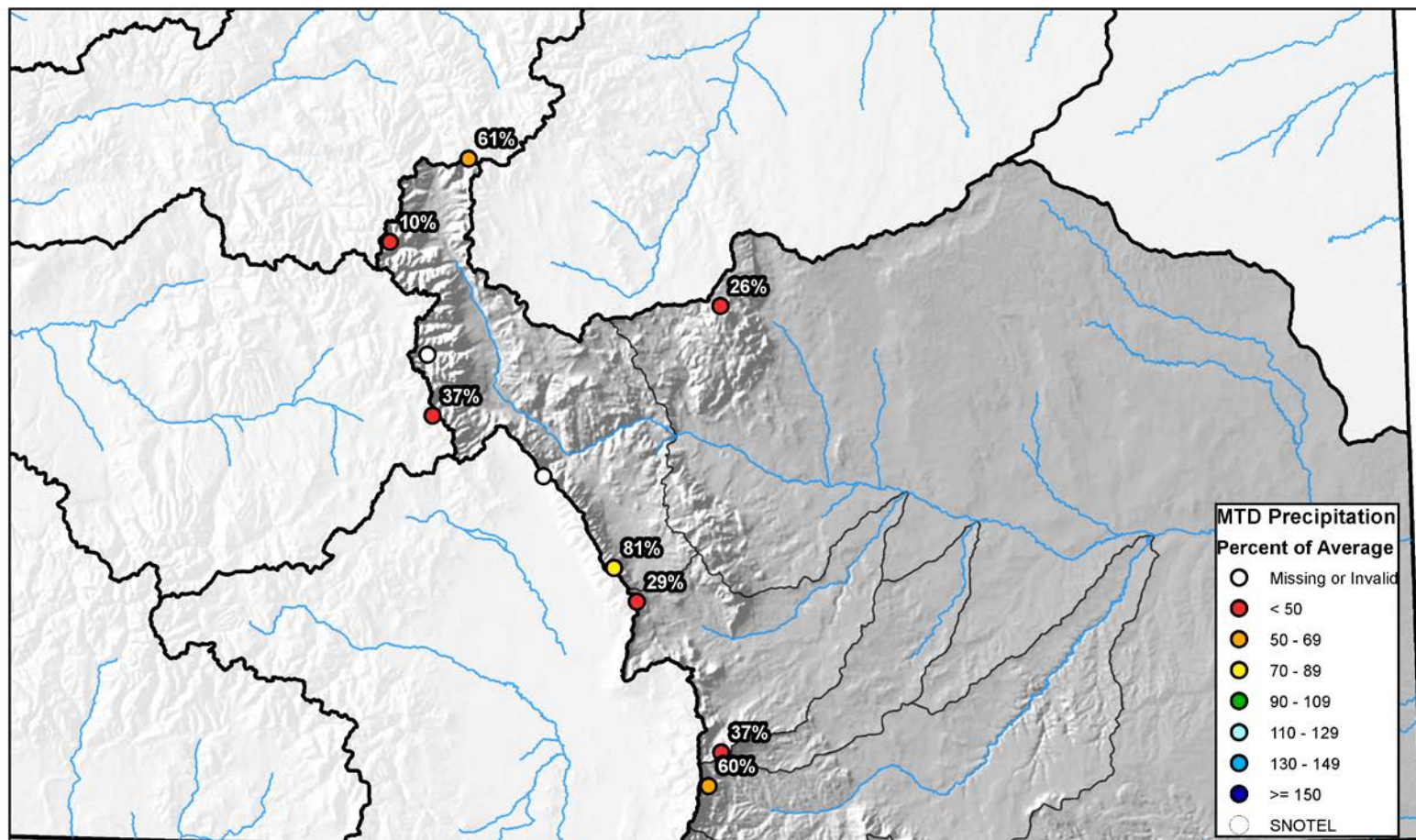
Arkansas River Basin High/Low Snowpack Summary

Based on Provisional SNOTEL data as of Jul 19, 2016



Arkansas River Basin Month to Date Precipitation Summary

Current as of Jul 19, 2016

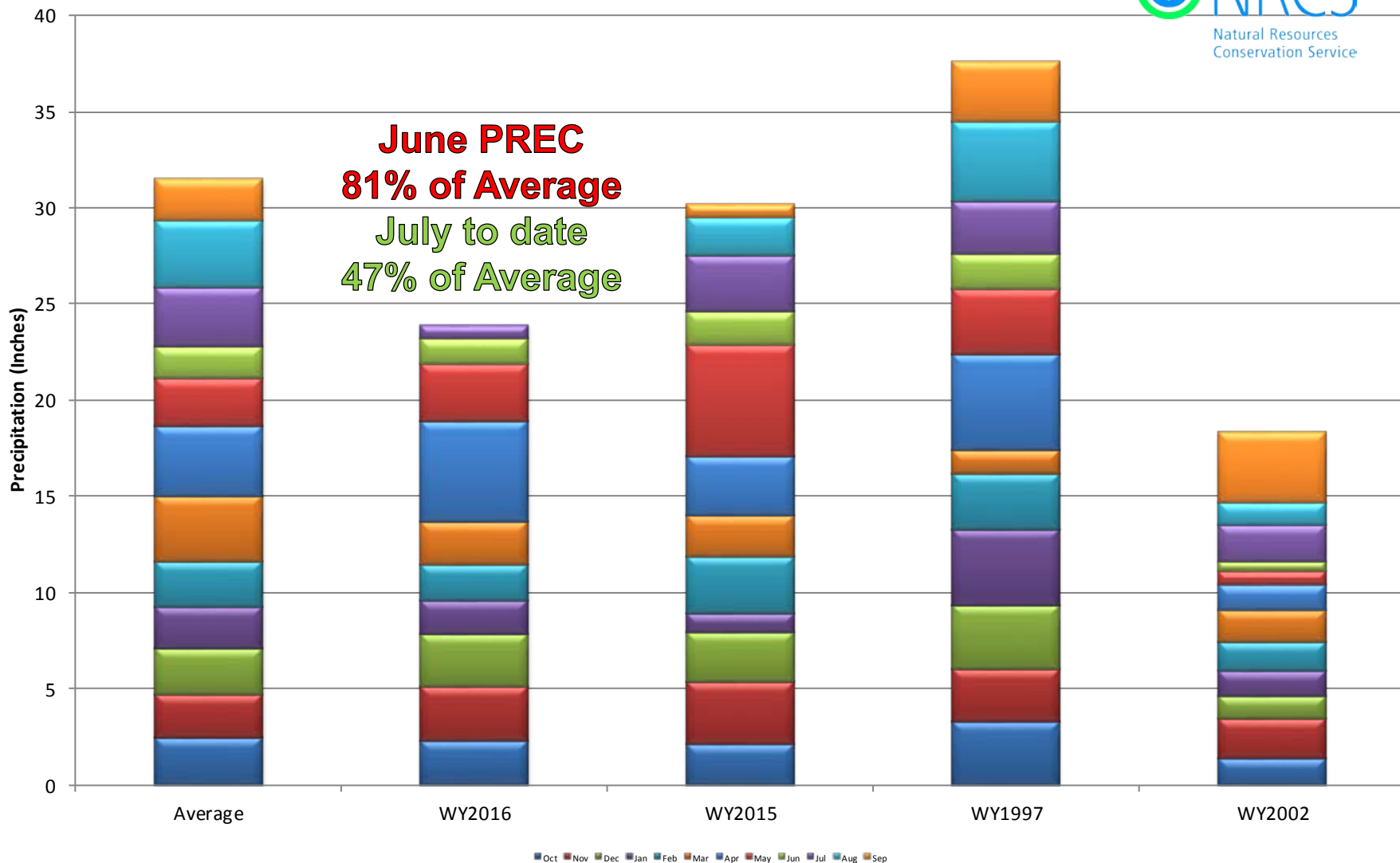


0 10 20 40 60 80 Miles



Arkansas River Basin High/Low Monthly Precipitation Summary

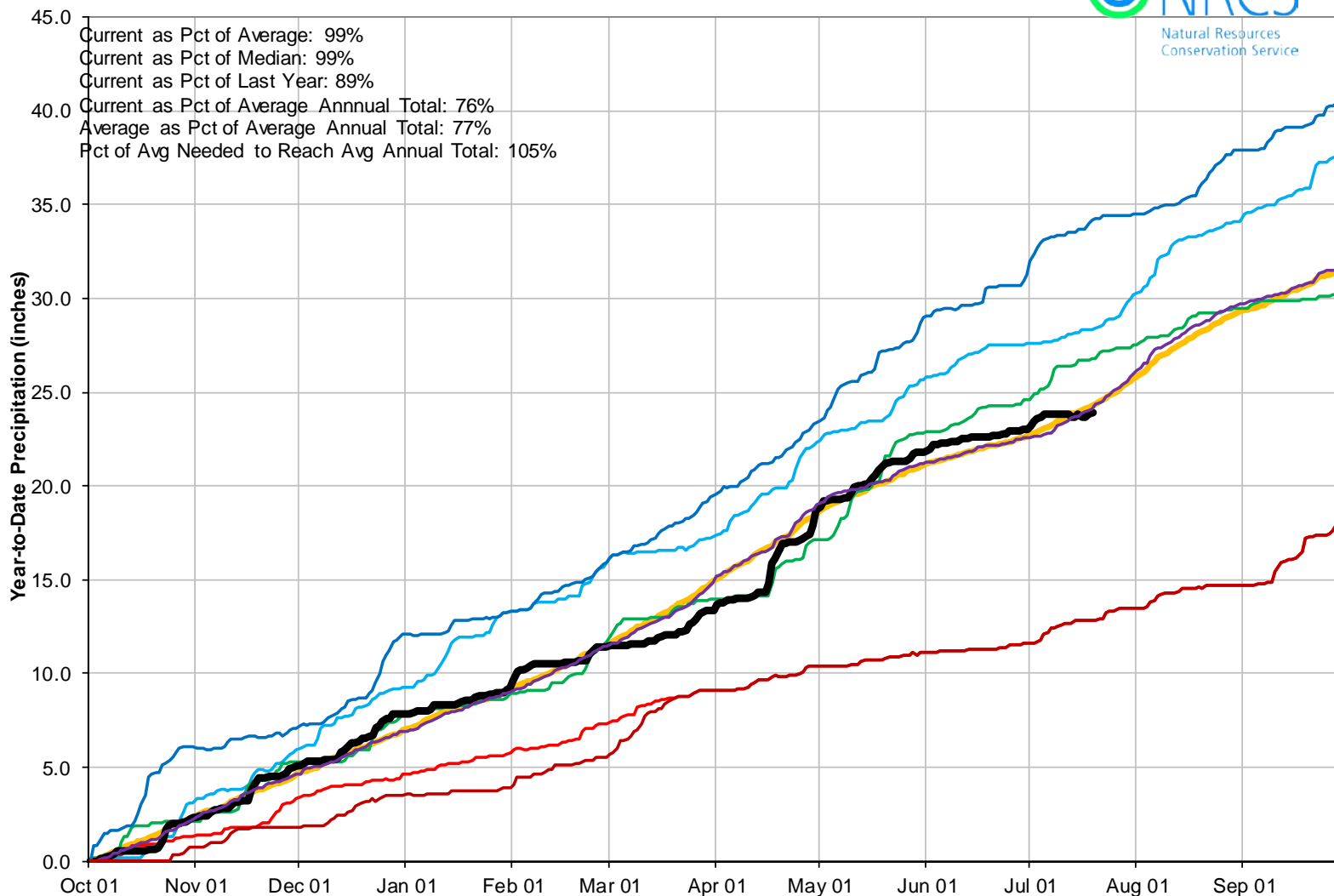
Based on Provisional SNOTEL data as of Jul 19, 2016



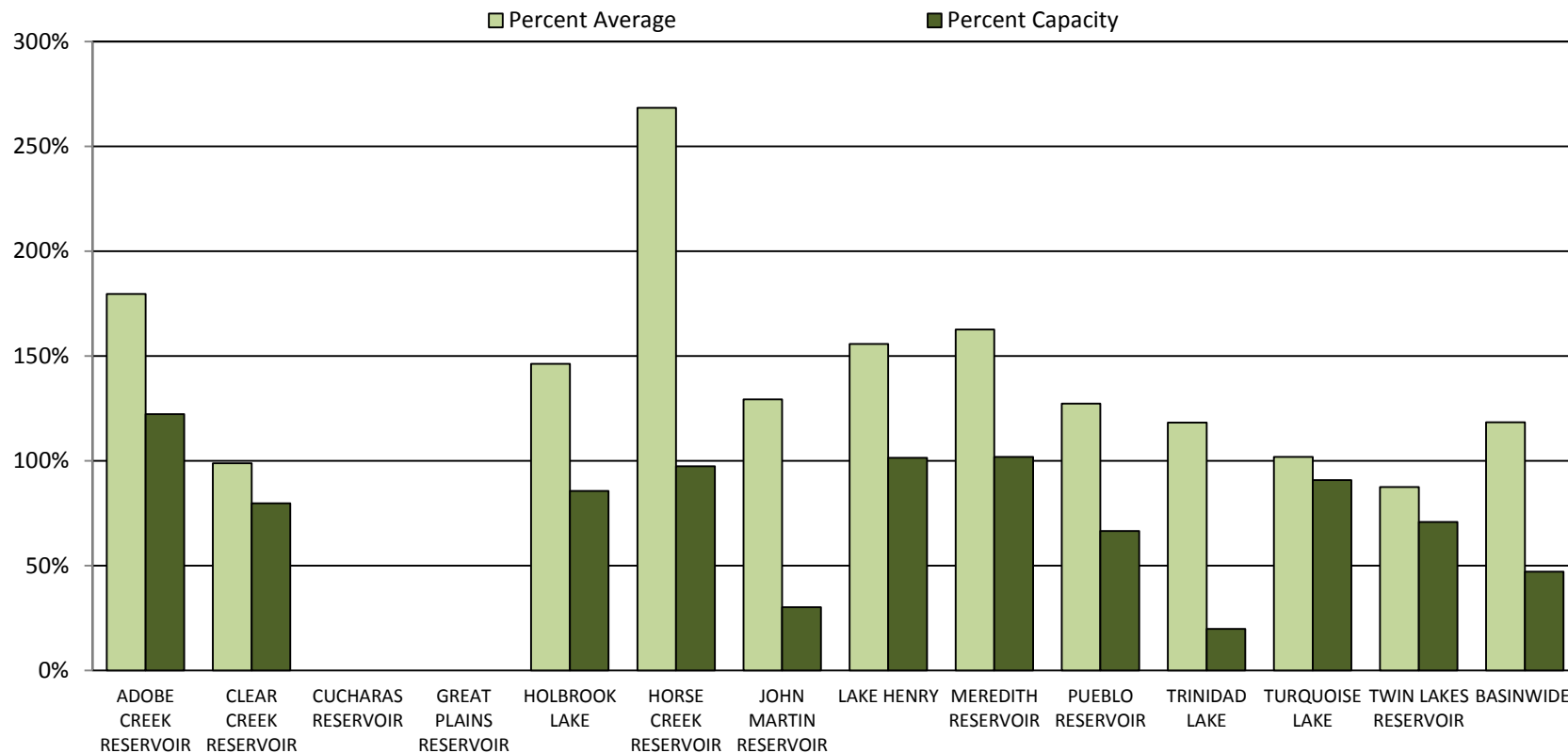


Arkansas River Basin High/Low Year-to-Date Precipitation Summary

Based on Provisional SNOTEL data as of Jul 19, 2016

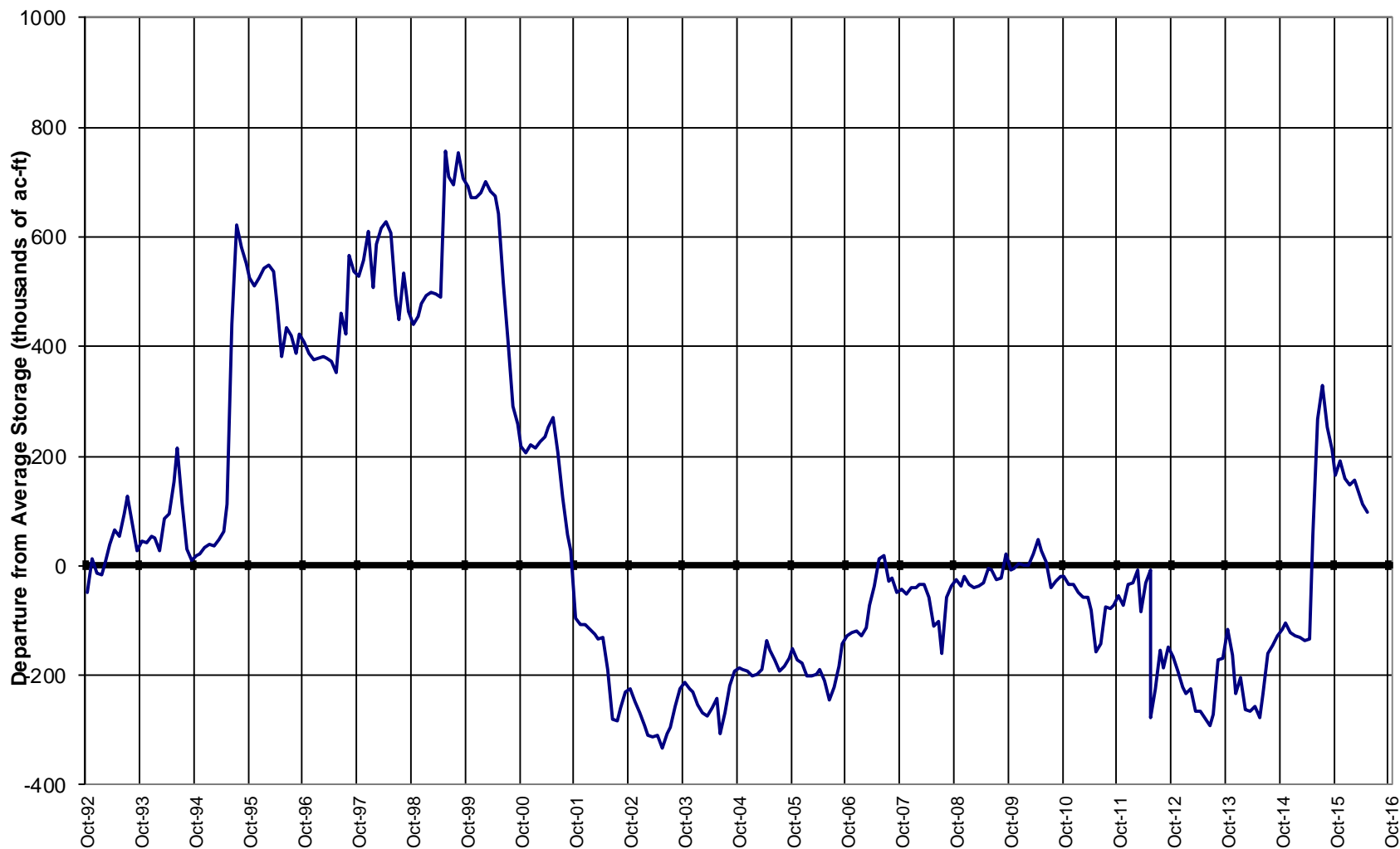


Reservoir Storage



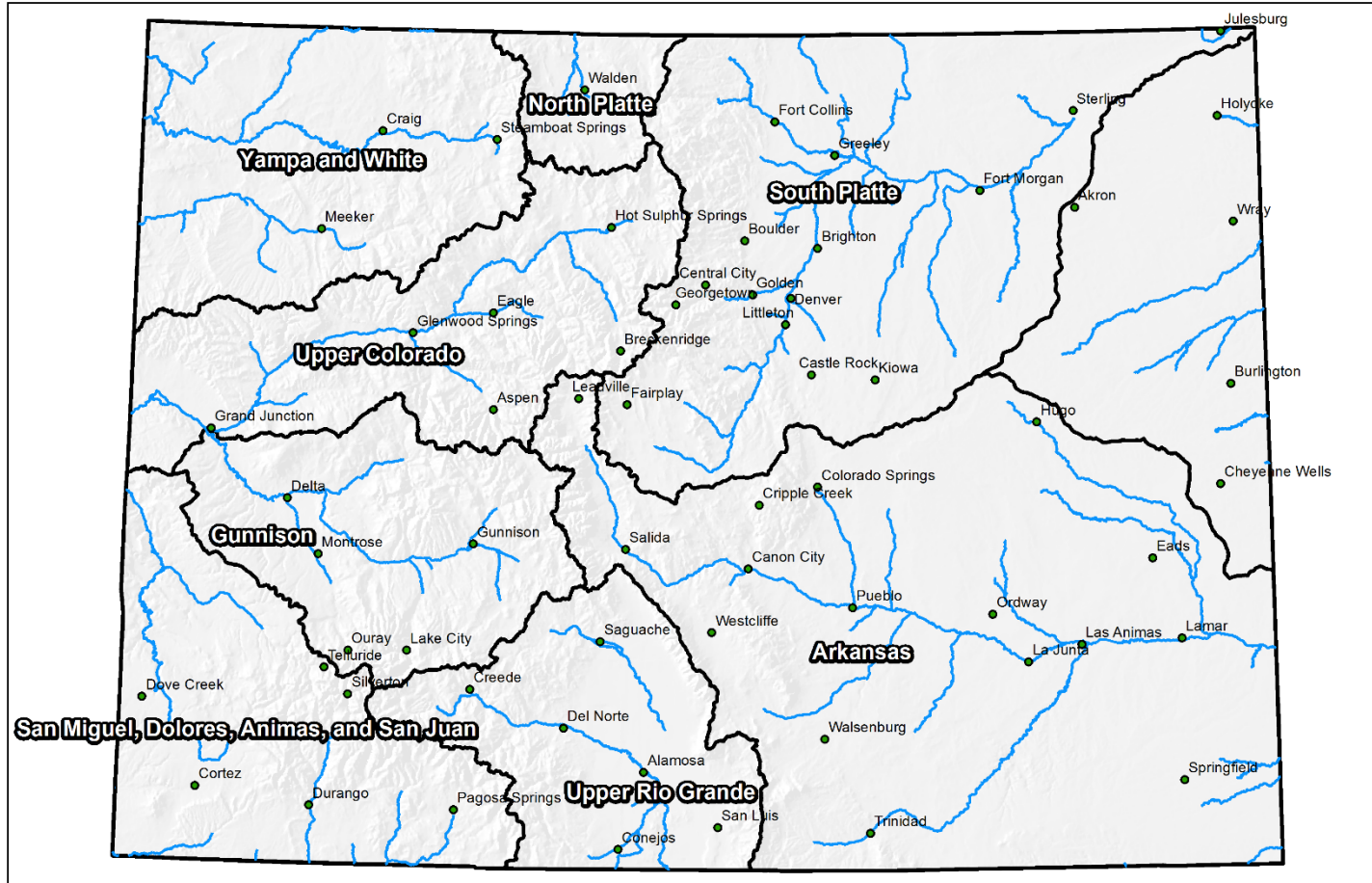


ARKANSAS RIVER BASIN Reservoir Storage Departure from Average



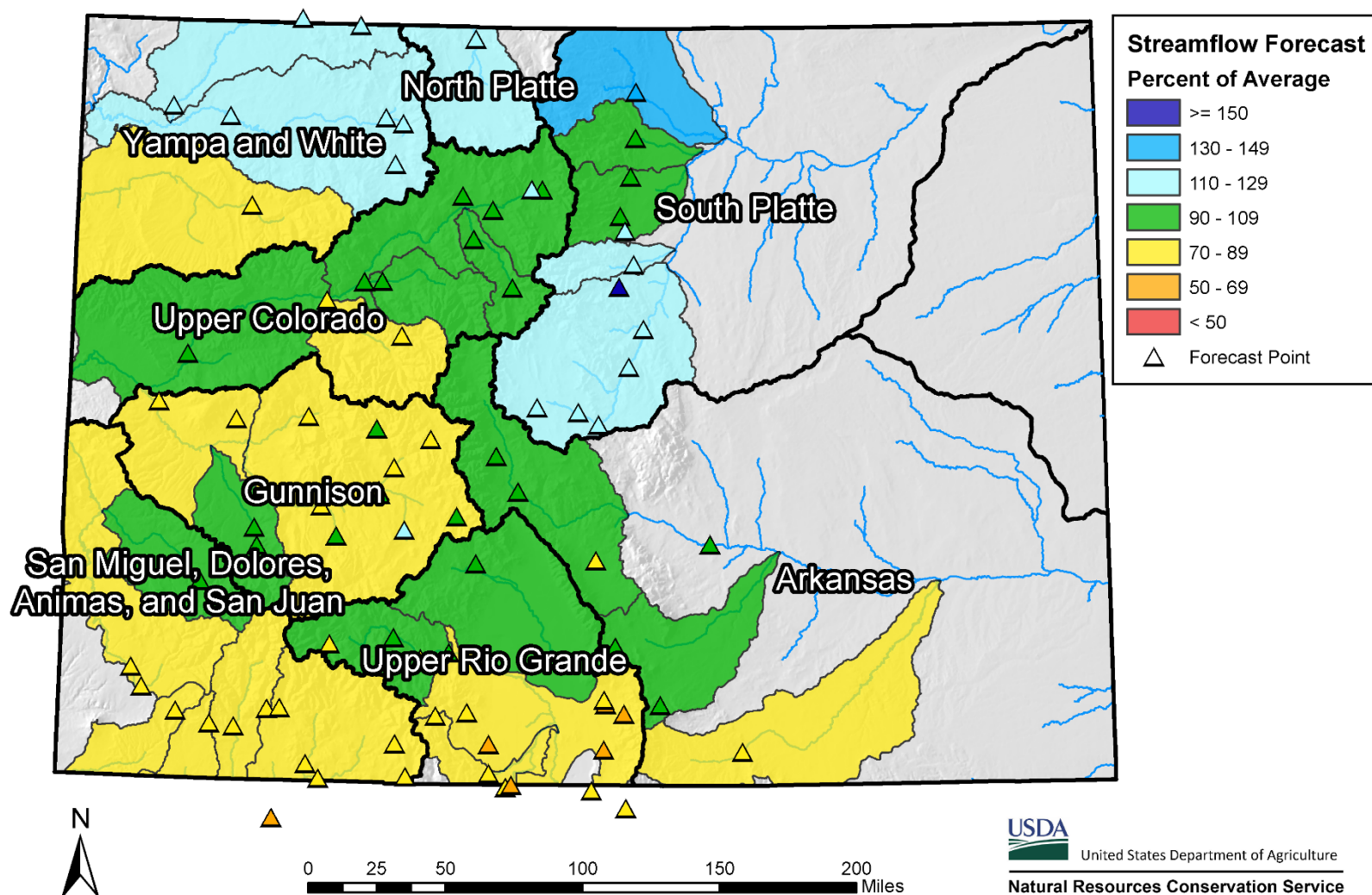
Colorado Statewide Summary

Colorado Major Basins



0 25 50 100 150 200 Miles

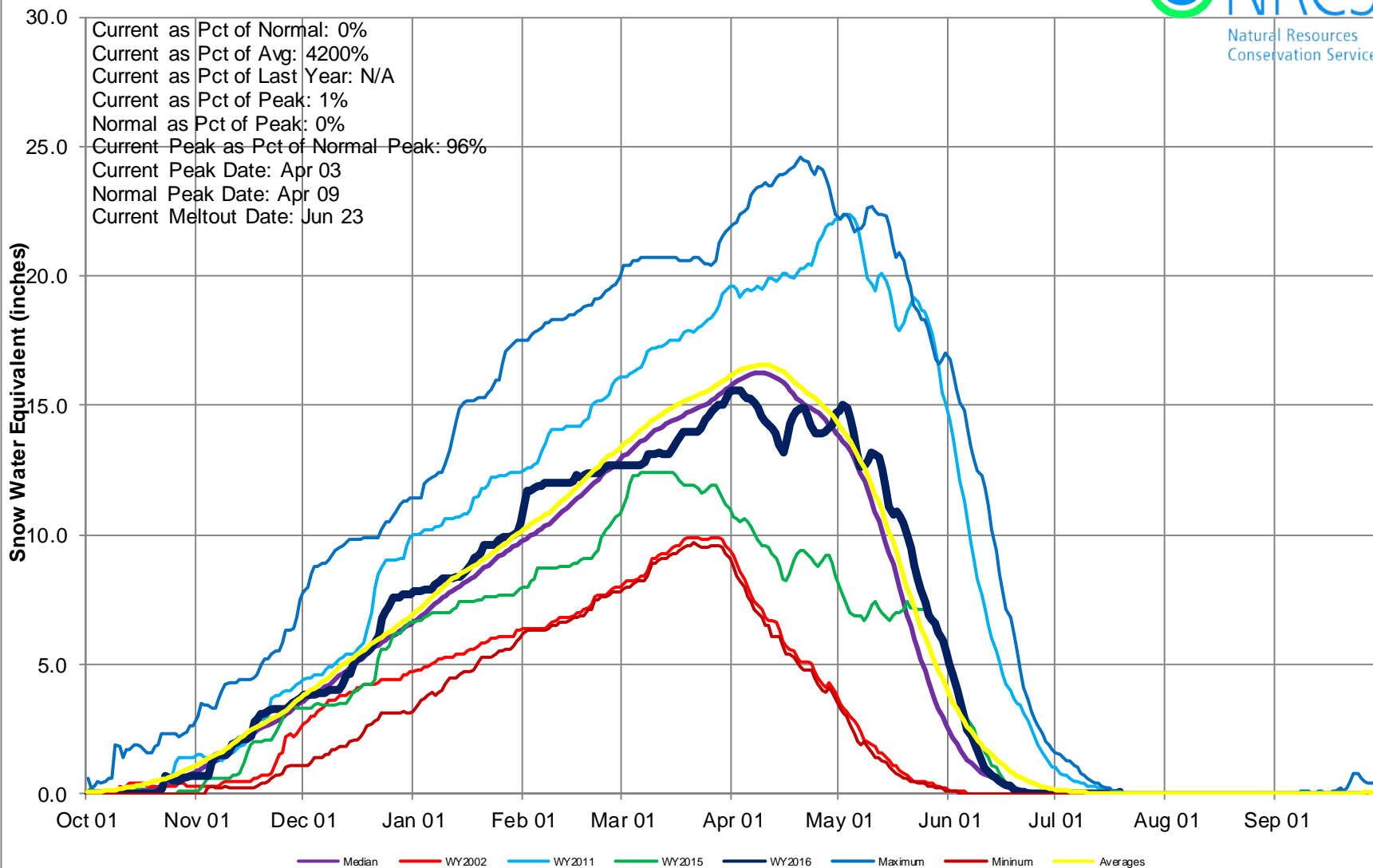
Colorado Streamflow Forecasts Summary June 1, 2016





Colorado Statewide High/Low Snowpack Summary

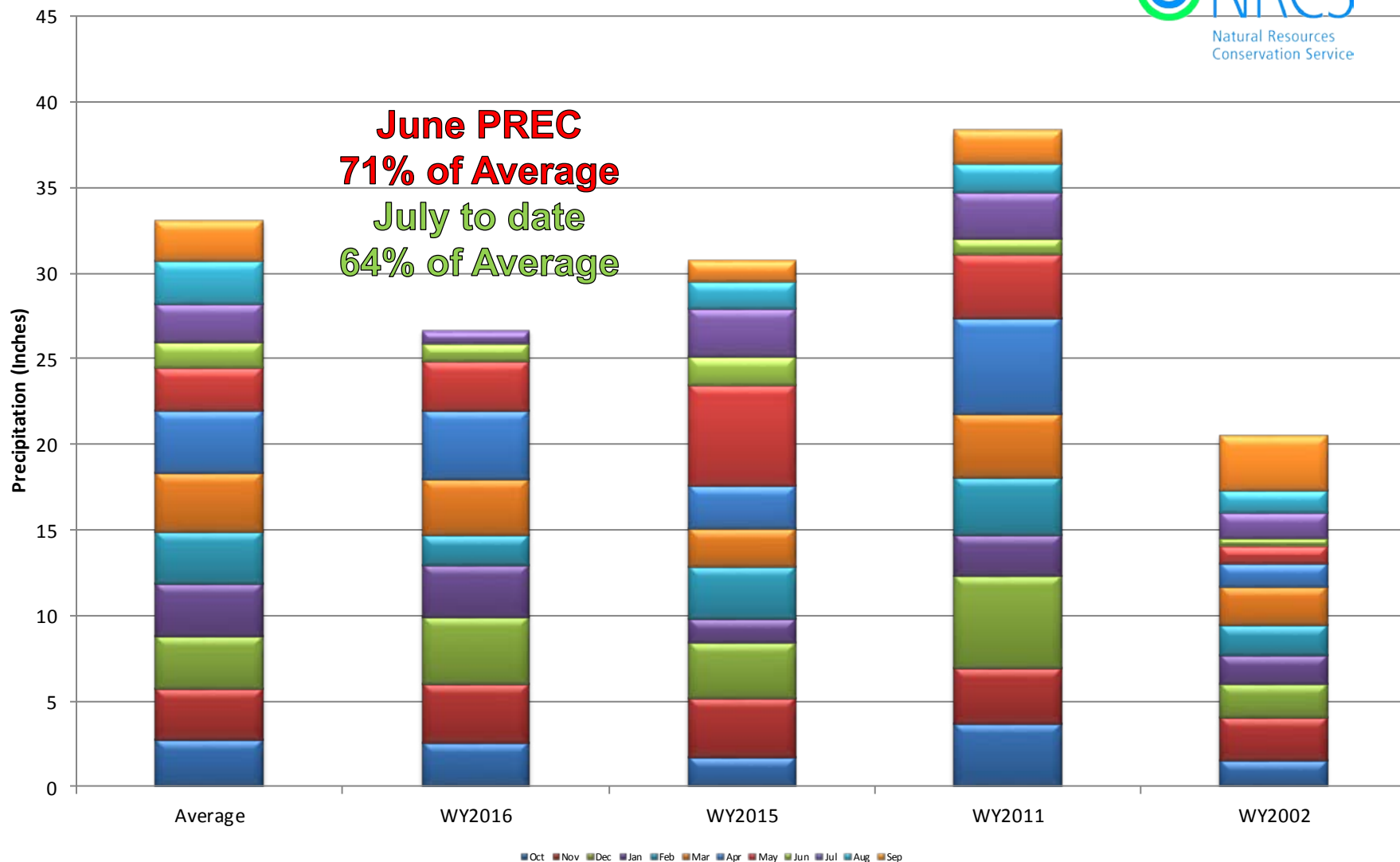
Based on Provisional SNOTEL data as of Jul 19, 2016





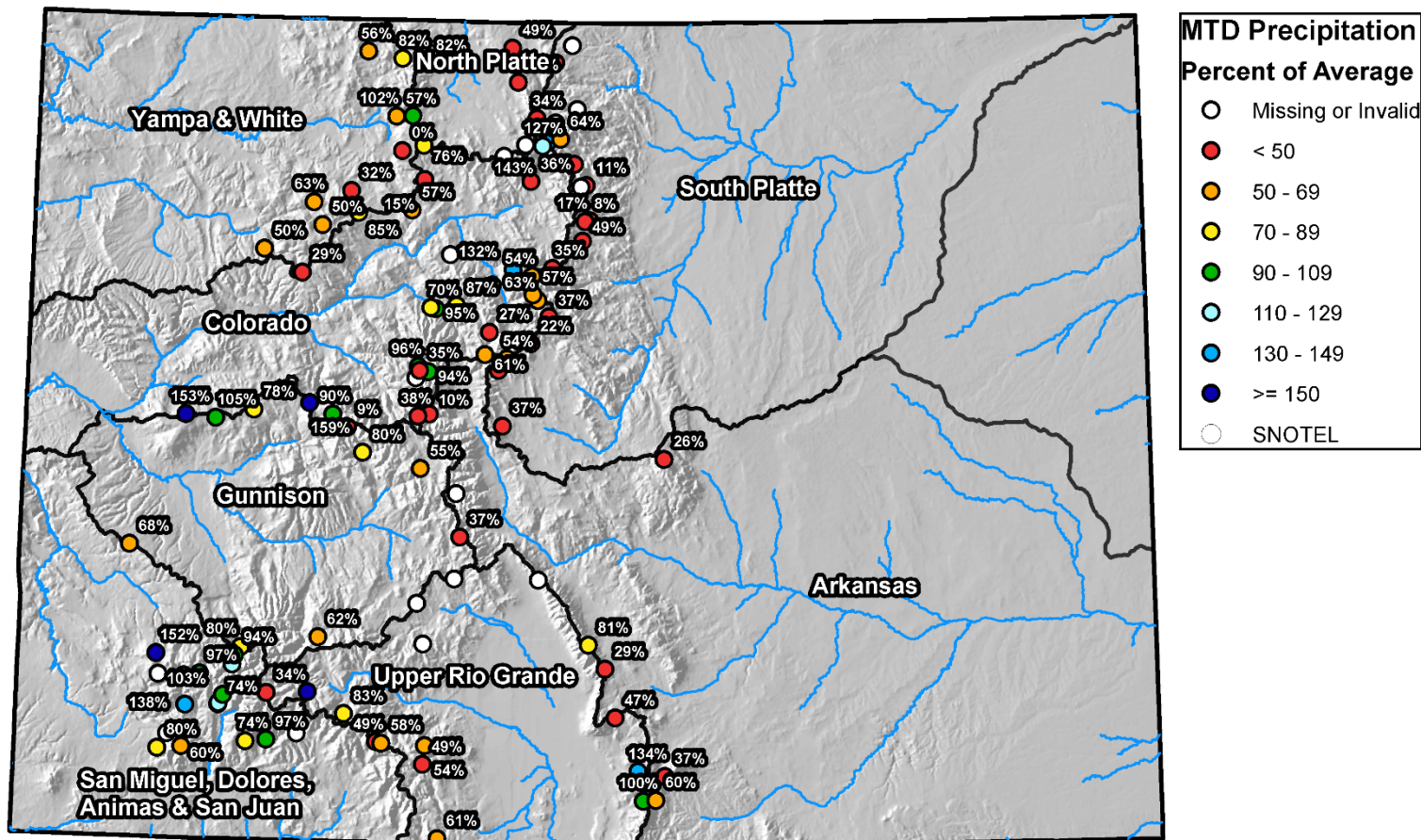
Colorado Statewide High/Low Monthly Precipitation Summary

Based on Provisional SNOTEL data as of Jul 19, 2016



Colorado SNOTEL Month-to-Date Precipitation

Current as of Jul 19, 2016

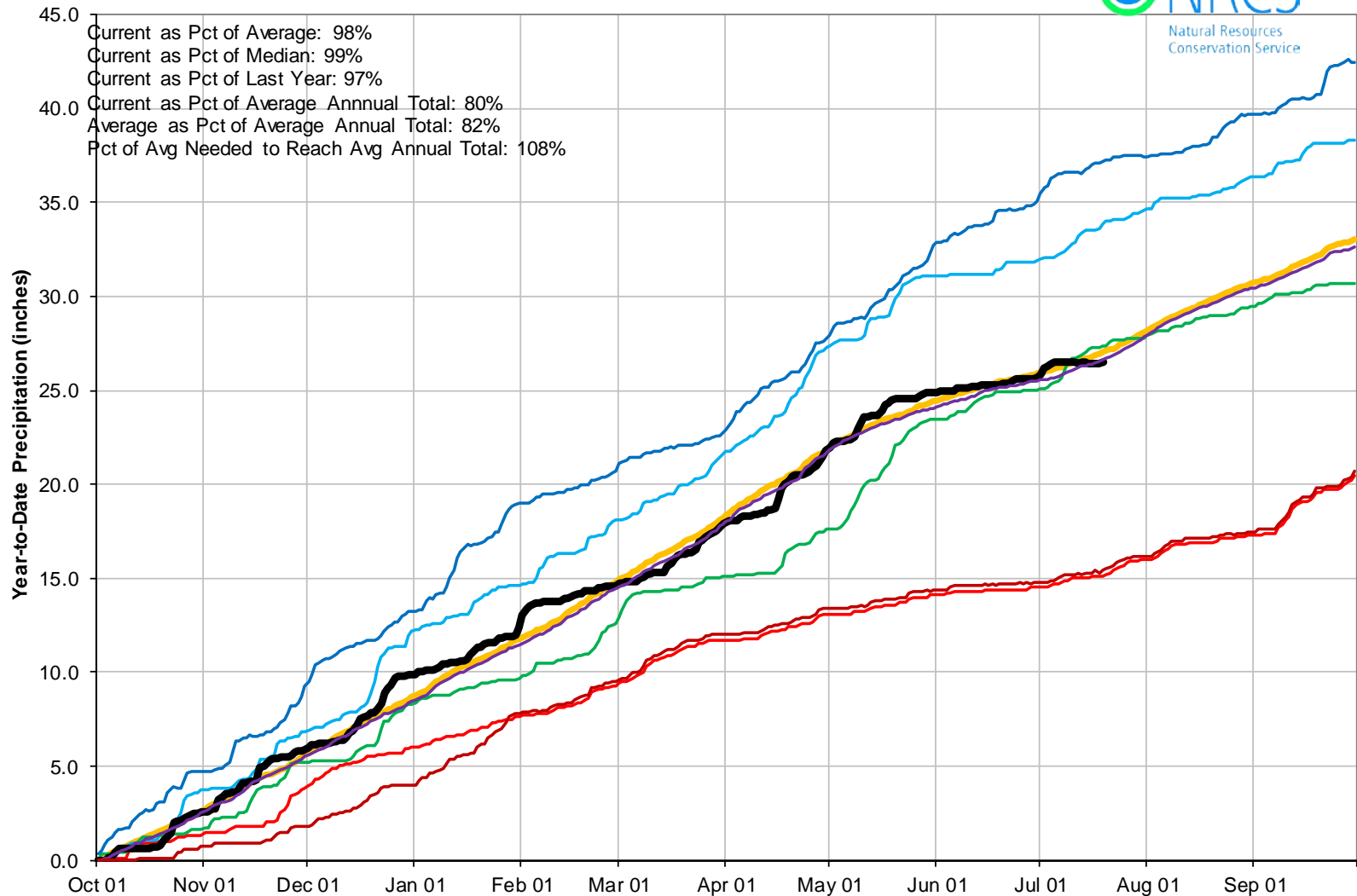


0 25 50 100 150 200 Miles



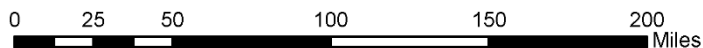
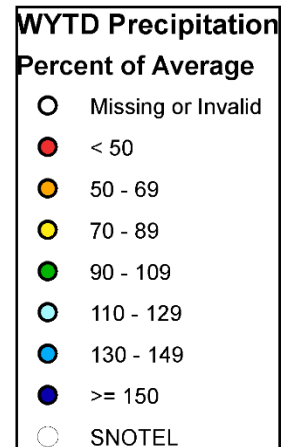
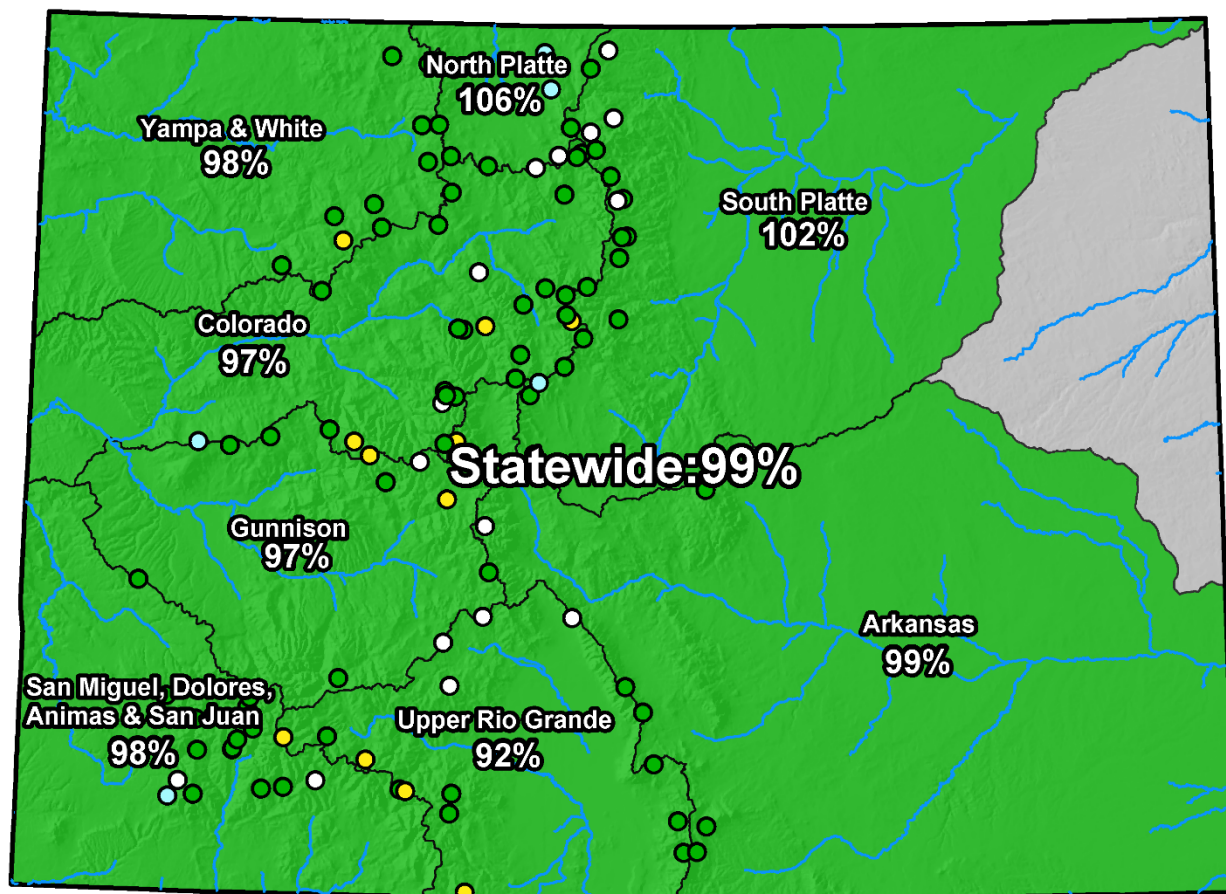
Colorado Statewide High/Low Year-to-Date Precipitation Summary

Based on Provisional SNOTEL data as of Jul 19, 2016



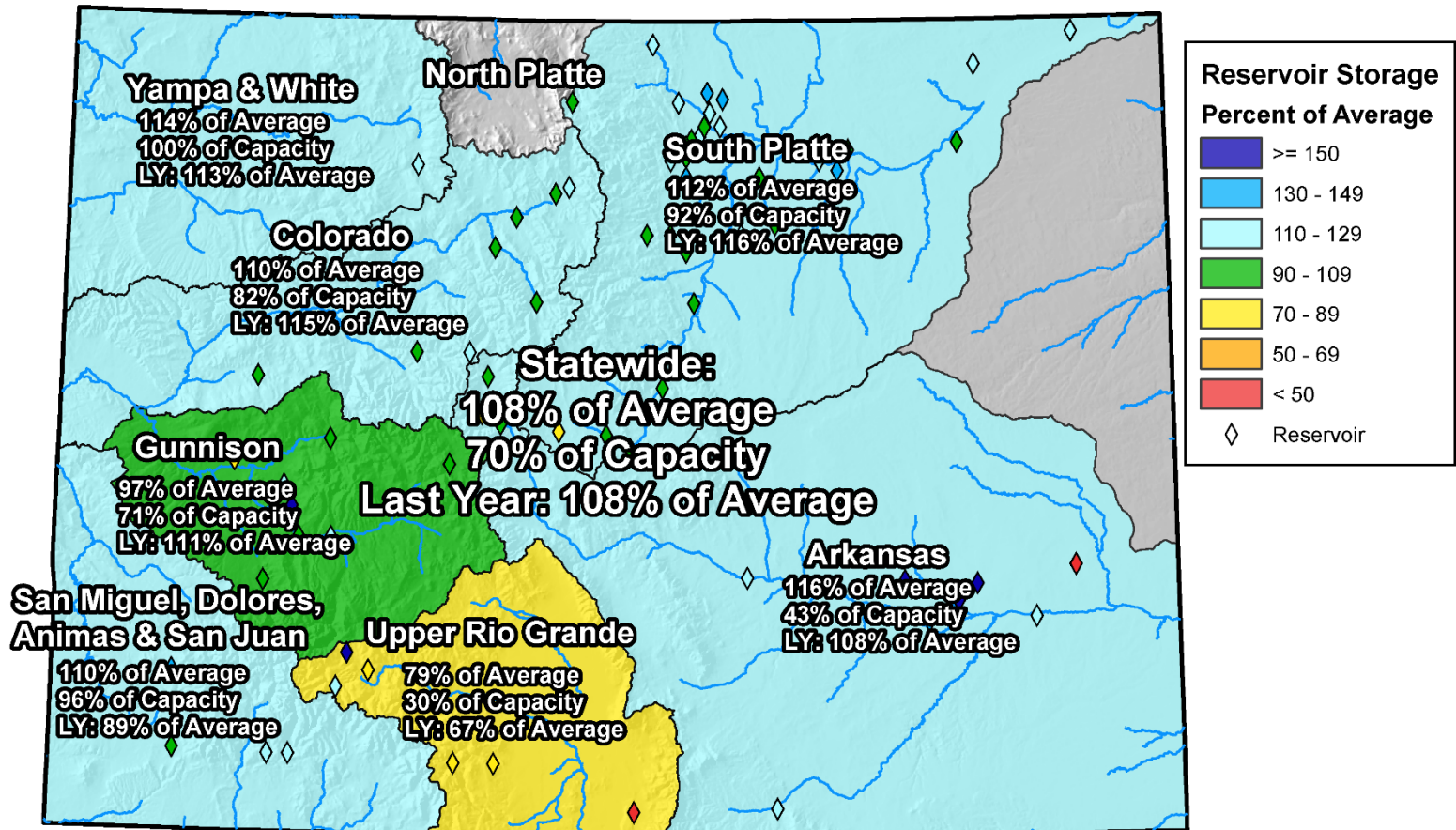
Colorado SNOTEL Water Year to Date Precipitation

Current as of Jul 19, 2016



Colorado Monthly Reservoir Storage Summary

End of June 2016

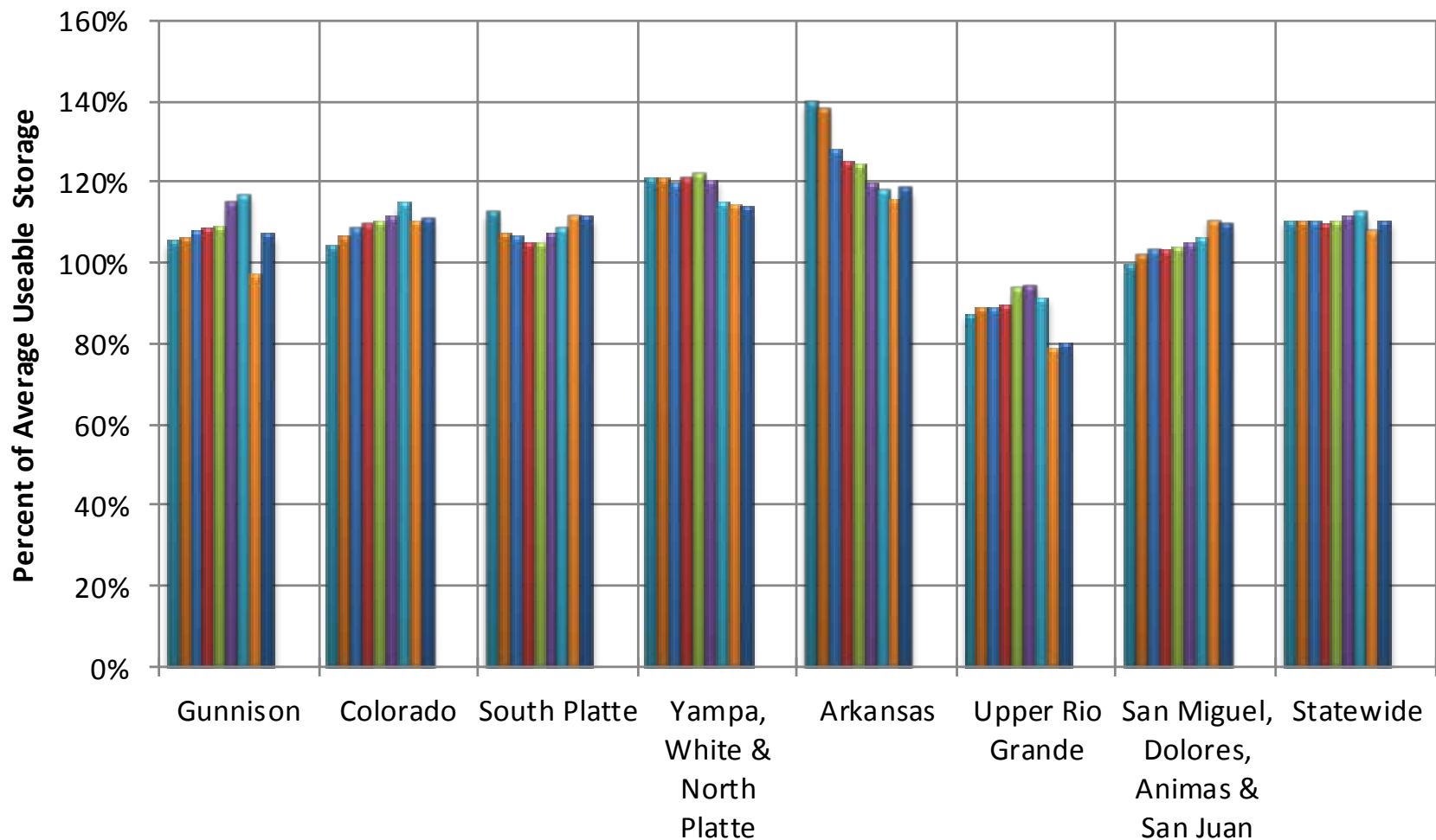


0 25 50 100 150 200 Miles



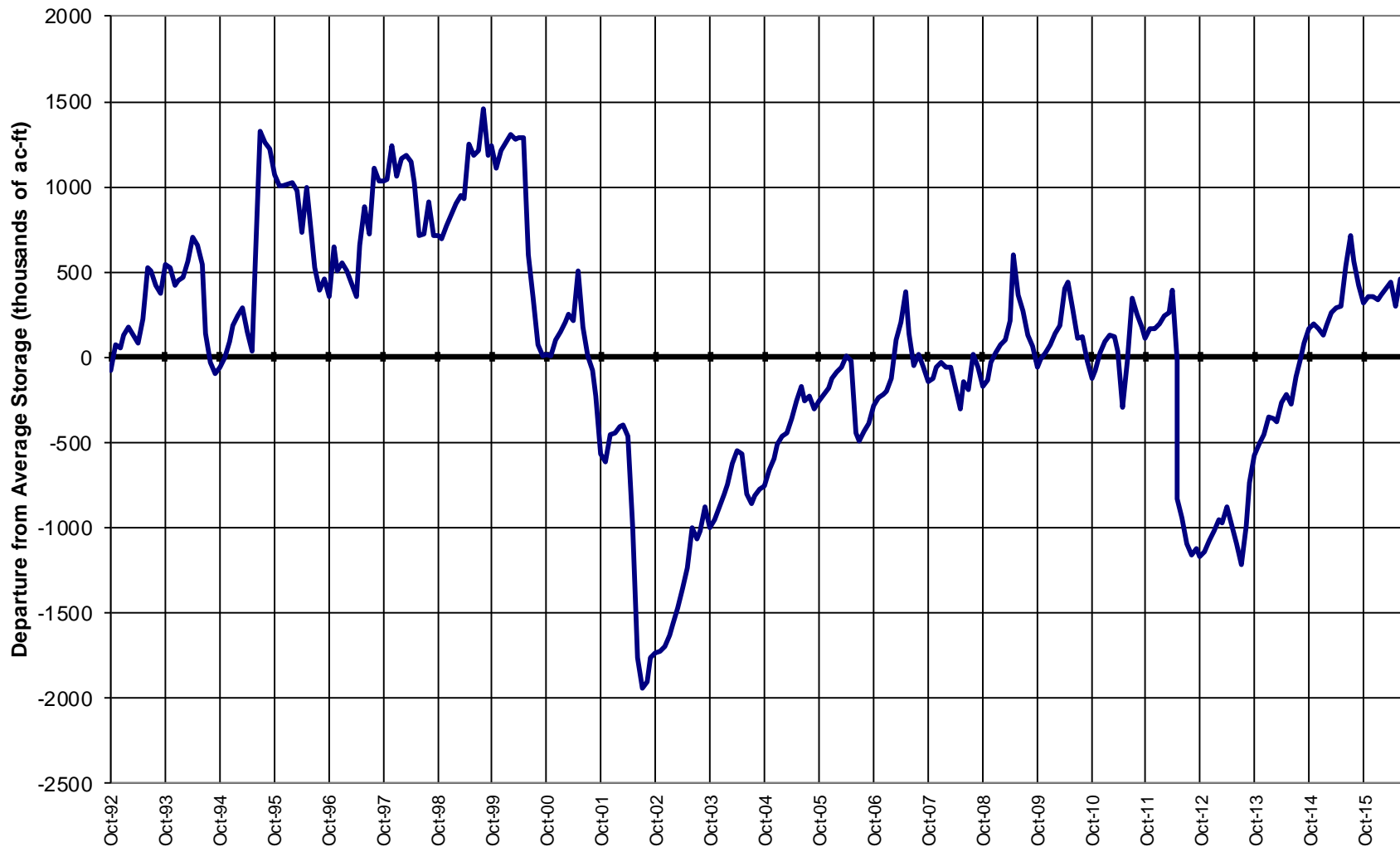
Colorado Reservoir Storage

Oct-15 Nov-15 Dec-15 Jan-16 Feb-16 Mar-16
Apr-16 May-16 Jun-16 Jul-16 Aug-16 Sep-16





COLORADO STATEWIDE Reservoir Storage Departure from Average

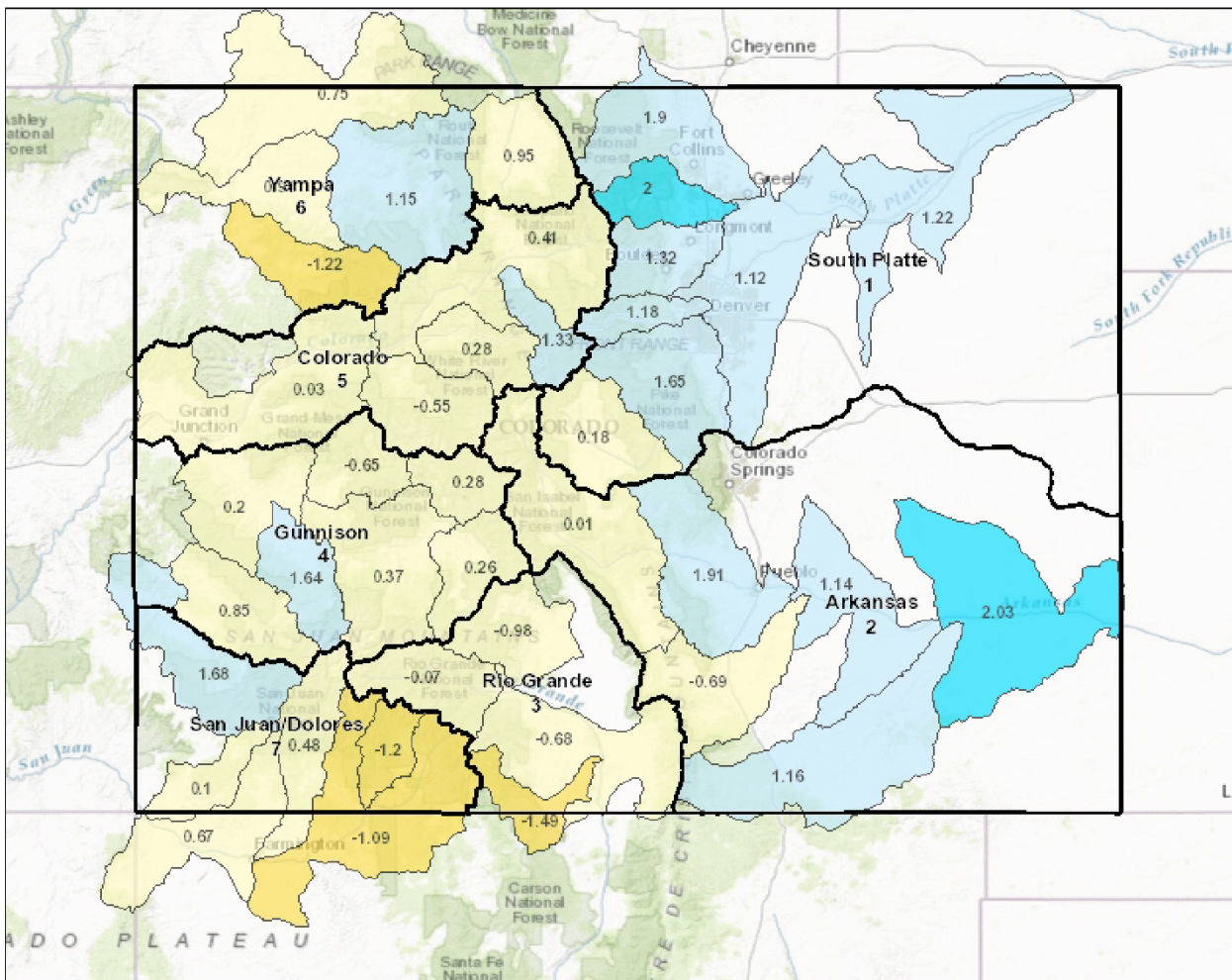




CDSS

Colorado's Decision Support Systems

Map Viewer



Legend

☐ Division

SWSI - Current (June 2016)

☐ SWSI Not Applicable (-99.99)

☐ Extremely Dry (-3.0 - -4.2)

☐ Moderately Dry (-2.0 to -2.9)

☐ Slightly Dry (-1.0 to -1.9)

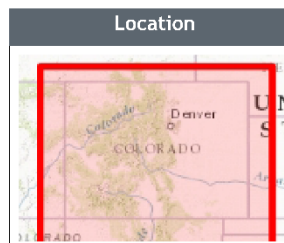
☐ Near Average (-0.9 to 0.9)

☐ Slightly Wet (1.0 to 1.9)

☐ Moderately Wet (2.0 to 2.9)

☐ Extremely Wet (3.0 to 4.2)

Citations



Notes

113.39 0 56.7 113.39 Miles

1: 3,592,220



This product is for informational purposes and may not have been prepared for, or be suitable for legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information.

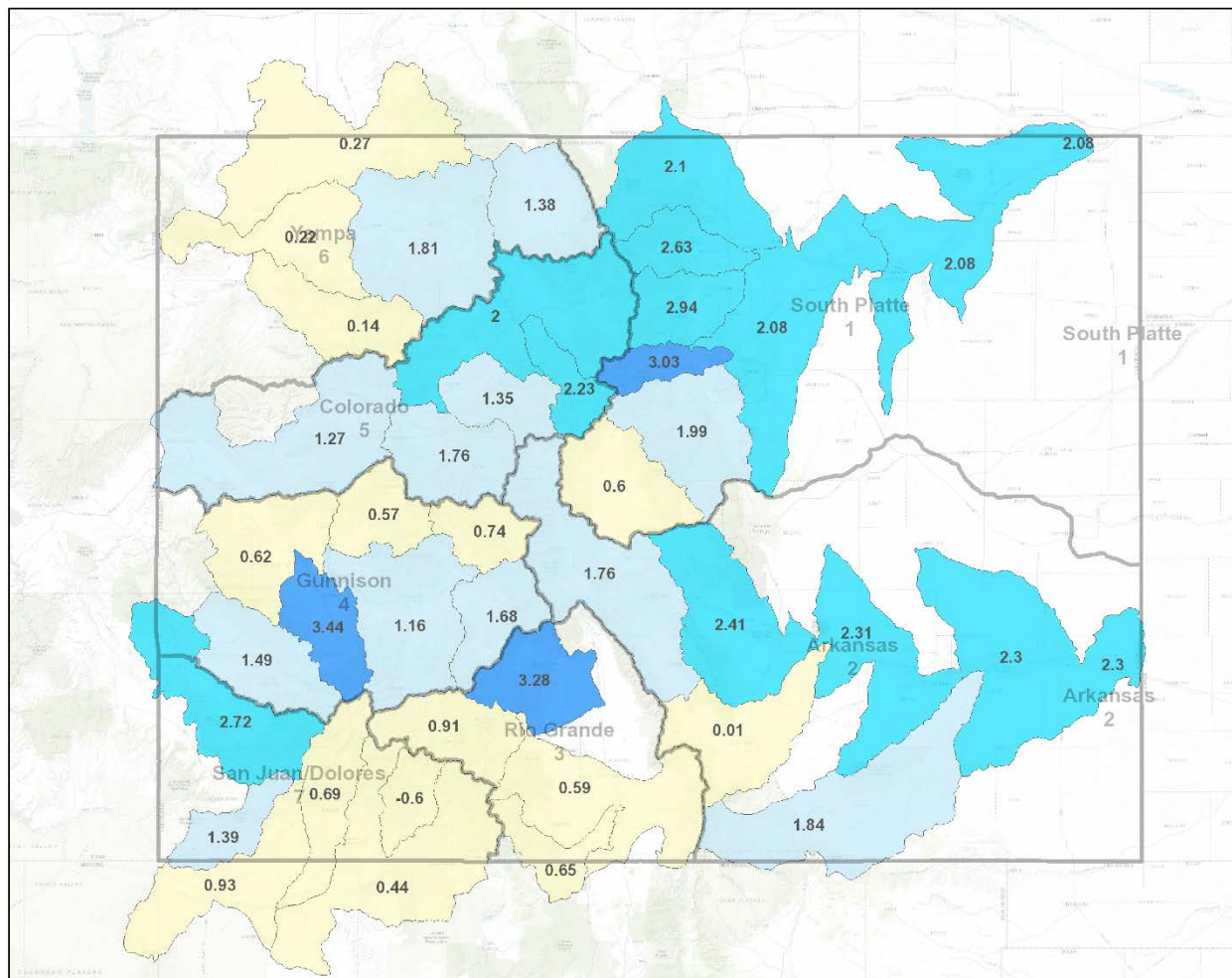
Date Prepared: 6/22/2016 11:37:41 AM



CDSS

Colorado's Decision Support Systems

Map Viewer



Legend

- Division**

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 - Near Average (-0.9 to 0.9)
 - Slightly Wet (1.0 to 1.9)
 - Moderately Wet (2.0 to 2.9)
 - Extremely Wet (3.0 to 4.2)

Citations

Location



Notes

113.39	0	56.7	113.39 Miles
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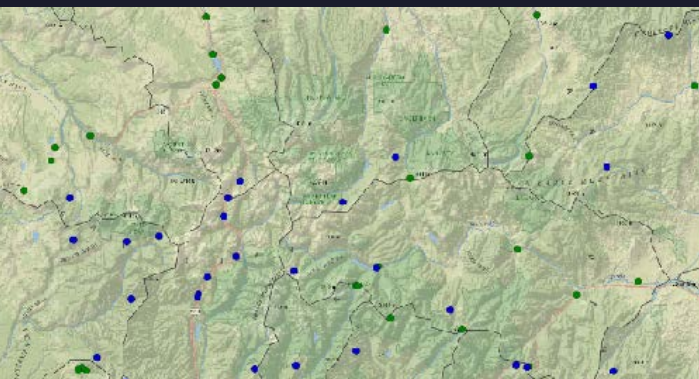
1: 3,592,220



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Date Prepared: 7/19/2016 7:23:20 AM

Red Mountain SNOTEL Removal



- Red Mountain SNOTEL was installed on a patented mining claim back in 1978
- It is one of the most important sites in the country
- This site has one of our longest data records in the state
- Data is used and highly correlates to forecasts in the
 - Rio Grande
 - San Miguel, Dolores, Animas & San Juan Basins
 - Gunnison -> to the Colorado River & down stream
- The plan is to move the site 100 ft away but no guarantee the data integrity will be maintained



Summary

- Almost all SNOTEL stations in the state are now melted out
- June precipitation was poor across the state and July precip so far has been worse
- Statewide we have remained at near normal WY precip and fallen just below normal
- Reservoirs statewide remain in relatively good standing at 108% of normal, the same as last month
- SWSIs are generally near normal across the state
- Red Mountain SNOTEL will hopefully be moved soon but unsure with USFS permits and other uncertainties



United States Department of Agriculture

Colorado Snow Surveys

Water Availability Task Force Meeting

July 19th, 2016

NRCS Snow Survey and Water Supply Forecasting Program

Brian Domonkos

Hydrologist

720-544-2853

<http://www.nrcs.usda.gov/wps/portal/nrcs/main/co/snow/>